The future of the University of Linköping
- networking as means for coping with the Bologna Process

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**Abstract**

*Background:* During the past years the increasing internationalisation has not only affected companies but also universities. This development is due to the Bologna Declaration which prescribes a harmonisation of the higher education in Europe. The declaration implies a tougher competition, but also a higher degree of co-operation among European universities.

*Purpose:* The purpose of this thesis is to examine how LiU can make use of the network approach in the process of internationalisation, in order to cope with the changes that the Bologna Declaration implies.

*Realisation:* We have carried out a total amount of 17 interviews. To complement these
interviews, secondary data about the Bologna Process and LiU have been extracted from the internet and other information material.

*Results:* LiU should take advantage of the opportunities provided by the Bologna Process in order to further internationalise. The most favourable way of networking for LiU would be to be a part of relatively small and complementary networks. The promotion and facilitation of the communication between partners, but also within the university, is crucial. Use, and constantly develop, the competitive advantages in order to seek possible network partners and to attract students, teachers and researchers.

**Nyckelord**
Keyword

internationalisation, networks, competitive advantage, the Bologna Process, the University of Linköping
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1. Introduction

During the past years the increasing globalisation has resulted in that barriers between national and regional market have been broken down. Furthermore, it has made the competition more intense, since the value of the market has decreased as a result of the wider market. For a company to be successful in this new climate it is of great importance for it to anticipate market trends, and be able to quickly respond to changing customer needs. (Stalk et al. 1992, in Lane and Bachmann, 2000) Cooperation is a new kind of competition tool that has emerged to meet the changing contextual conditions. This kind of partnership can be explained as a group of companies with a common purpose that are linking themselves together, competing in the global market as groups against other groups. These co-operations can be named networks and differ in focus and size. (Gomes-Casseres, 1994) It is a good alternative for a company that is striving for internationalisation to make use of its networks and co-operate through them. This gives the company a great opportunity to accelerate, both in the process of its internationalisation, as well as in its development process. (Jaklic 1998)

The trend towards globalisation and networking resulted e.g. in the creation of the European Union\(^1\), which Sweden entered in January in 1995 (http://www.ladas.com). This co-operation has resulted in contextual changes, which has made the borders between European countries less visible and barriers have been eliminated. It has also led to that the relationships between the EU members have deepened in various areas. The development towards a united Europe is a continuous process. The Lisbon Convention of 1997 is good example of that. It was elaborated during a meeting between the European Council and UNESCO\(^2\). The convention stresses that it is vital to remember, that Europe is not only that about the economy, the banks and the Euro. Furthermore, the co-operation process has to consider a Europe of knowledge as well. (http://www.bologna-berlin2003.de, 1)

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\(^1\) The EU
\(^2\) United Nations Educational Scientific and Cultural Organization
Introduction

The basis for the Lisbon Convention was the recognition of education as a human right. Furthermore, it was stated that advanced knowledge obtained through higher education, constitutes a valuable cultural and scientific asset, both to the individual and to the society. Considering these aspects, higher education ought to play a fundamental role in the mutual understanding and tolerance among nations. Furthermore, it should play an important role in the creation of confidence among European countries and their inhabitants. These are factors that are promoting peace, which was one of the basic ideas with the EU. A European area of higher education would also provide the students with the best opportunities to seek and develop their specific area of interest. However, this procedure requires removal of barriers and development of a framework for teaching and learning. This would in turn enhance mobility and closer cooperation. The Lisbon Convention has developed further into a more specific declaration regarding the higher education in Europe, the Bologna Declaration3 (http://www.bologna-berlin2003.de, 2)

1.1. Problem discussion

The universities4 in the European countries that have approved of and signed the Bologna Declaration are confronted with new requirements of their educational systems. The aim with the declaration is, among other things, to improve the teacher and student mobility between the European countries. It also aims at a harmonization of the higher education systems in Europe and improvement of its quality. The harmonization implies a co-ordination of grades, credits and degree systems. This should in turn make it easier for students to apply for jobs throughout Europe, since the employers will know how to interpret their grades and the content of their education. (http://utbildning.regeringen.se, 3)

The Bologna Process can be seen as a positive development, but it can also be a problem to various universities. For some universities the declaration

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3 We will hereafter also refer to the Bologna Declaration as the Bologna Process.
4 We include colleges as well in this definition. Henceforth, we will only use the word universities as an expression for the both of them.
implies fame breaking changes concerning the structure of their education. The Bologna Process also contributes to an extensive European student market, which will lead to a tougher competition among European universities. This change can lead to that the Swedish universities have to chose whether or not they want to be local, or participate on the international student market. Furthermore, there might be a restricted need for international universities in Sweden, which can result in that some of them will be eliminated. (Sandewall)

The Bologna Process implies structural changes for Swedish Universities, including the university we will scrutinize; the University of Linköping. The structural changes are necessary for LiU, in order for it to be able to implement the new educational system that the Bologna Declaration demands. LiU wants to be considered an international university. Its early internationalisation in the late 1960’s, when its first exchange was established, is a sign of that. (ECTS practical guide 2002-2004) This indicates that the international path should be chosen. As recently mentioned, this path signifies a tougher competition and a more extensive student market. This in turn demands that LiU should be able to compete through keeping a high quality on its education. Various strategies can be chosen for accomplish the high quality standard. We have chosen to scrutinize LiU’s internationalisation process through a network perspective, since it’s an efficient path according to Jaklic (1998). This leads us further to the purpose of our thesis.

1.2. Purpose

The purpose of this study is to examine how LiU can make use of the network approach in the process of internationalisation, in order to cope with the changes that the Bologna Declaration implies.
1.3. Research questions

- What kinds of networks could LiU make use of in order to cope with the tougher competition?

- How should the relations within the network be handled in best possible way?

- What possible competitive advantages does LiU have, and how can they be developed and sustained?

1.4. Scope

There are a lot of aspects that can be considered concerning the Bologna Process and its implementation at the European universities. We have decided to focus on networks between European universities. The thesis has a student perspective, which means that the network relations investigated essentially will have an impact on the students.

We have chosen to turn to a quite broad target group. This target group is presented below together with explanations why it is chosen. By doing this, we are of the opinion that it will make our disposition of the thesis more clearly to the reader.

- LiU is our main target group. The thesis takes a starting point from this university, in order to scrutinize possible alternatives of strategies, which can be used to cope with the Bologna Process. Furthermore, the thesis is adapted to students and employees at LiU, who do not know what the Bologna Process implies, and how it affects the educational conditions.

- We are of the opinion that this thesis can be useful to Swedish universities as well. It can function as a source for getting new
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ideas and inspiration, both from LiU’s work with the Bologna Process, but foremost from our discussions and conclusions.

- Although we are studying the implications of the Bologna Process at a Swedish university, we believe that it could be useful for foreign universities as well. We are of the opinion that it could work as a source of inspiration, as in the case with the Swedish universities. At the same time we hope to increase their understanding of how Swedish universities work, in particularly LiU. Hence, this is the reason to why we have chosen to write this thesis in English.

- We define universities as knowledge based organisations, due to their production and development of knowledge. Hence, we believe that this thesis can be helpful for other knowledge based organisations as well.

1.5. Disposition

The present chapter, the introduction, has aimed at providing an introductory presentation of our research area. Furthermore, the purpose of the thesis and the research questions has been presented. In chapter 2 our methodological approach is presented and discussed. This will create an understanding for the reader regarding the content and context of the thesis. The 3rd chapter presents the Bologna Process and its implications for higher education. In chapter 4 we present the empirical findings. The Frame of Reference constitutes chapter 5 and it will provide the theoretical base for our analysis in chapter 6. Chapter 7 contains the conclusions drawn from the analysis. In chapter 8 we present the recommendations worked out from the analysis. The last chapter of the thesis contains suggestions of further research, related to our area of study.

1.6. Introduction to LiU

LiU was founded as an independent college in the 1960’s and in 1975 it officially became a university. It is a public university and consists of the
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Institute of Technology, the Faculty of Arts and Sciences, the Faculty of Health Sciences, and a committee for Educational Sciences and Teacher Training. LiU is Sweden’s fifth largest university and ranks second in engineering and natural sciences enrolments. It is a popular university that attracts an average of 2.2 first-hand applicants per position. (www.liu.se, 4) This can be compared to the average in Sweden which is 2.3 (http://www.gu.se). At the University of Uppsala the number is 8 (http://info.uu.se) and at the College of Jönköping it is 1.4 (http://www.hj.se). It is also noticeable that LiU has got an international touch with its 300 partner universities in more than 50 countries. (Linköpings universitet i korthet, 2003) The university consists of 25,000 undergraduate students, 1,400 research students and 3,000 employees in total. The university is located in the cities of Linköping and Norrköping. Undergraduate education is available up to the master’s level in the liberal arts, social, educational and natural sciences, engineering and computer science, mathematics, medicine and the health care sciences (www.liu.se, 1)

The vice-chancellor, Mille Millnert, is the university’s top executive official, appointed by the Government. He is the possessor of this post during a period of six years starting in 2003. The highest decision-making body within the university is the University Board and there is also a Faculty Board that has the overall responsibility for each main area. (www.liu.se, 1)

The university has, as recently mentioned, campuses in Linköping and Norrköping. This region is considered as the 4th big city region in Sweden, after Stockholm, Gothenburg and Malmö, as the map above is showing. The theme of the region is: One university – two cities – one labour market. The purpose is to create a region with solid growth and make it competitive. (http://www.linkoping.se)
2 Methodology

In this chapter we will present the methodological approach and choices of this thesis. We will also present our motives for choosing the theoretical framework we have used as well as the empirical material. These choices will furthermore be critically evaluated. This will provide an understanding about how and in what context this study has been conducted and hence support the credibility of the thesis. Additionally, such an understanding will facilitate the application of our conclusions on to other universities, or knowledge based organizations.

2.1. Knowledge

The development and definition of knowledge are issues that need to be considered when writing a thesis. Our intent with this thesis is to make a contribution to the research about internationalisation through networking in knowledge based organizations. By using our insight in existing research and literature on the subject, we have chosen to focus on a specific phenomenon, the Bologna Process and its implications for the internationalisation at LiU. Our chosen focus is relatively unexplored, especially at LiU. Since this is the case, our intention is to create new ways of understanding the process of internationalisation when contextual changes such as the Bologna Process take place. It will further generate valuable information for LiU in the shape of suggestions of possible future strategies. Wallén (1996) argues that knowledge has often been seen as some kind of representation of the future and that such knowledge can be illustrated in e.g. handbooks. We believe that this thesis can be seen as a handbook for LiU. This is due to the fact that the thesis contains suggestions to how the declaration could be implemented at the university. The handbook is based on empirical data, which is supported by various theories. Most of these theories are not focusing on knowledge based organizations. We have therefore, interpreted them in our own ways, to use them for our specific subject. Wallén (1996) is of the opinion that when doing research, it is important to make the knowledge ones own.
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2.1.1. Frame of mind

During the work with this thesis, we have had a comprehensive frame of mind, the SWOT-analysis. We have not actually performed a SWOT analysis, instead we have used the model as a way of understanding the opportunities and threats that the Bologna Process implies for the Swedish universities. It has also been useful in order to help us identify the strengths and weaknesses that LiU has got, and when processing and analysing the empirical findings. Below, we will briefly present the SWOT-analysis, in order to provide further understanding of how we have used it.

The attributes that a company holds and controls will only become resources when exploiting the opportunities or neutralizes the threats in the company’s environment (Barney, 1991, in de Wit & Meyer, 2002). The opportunities and threats allude at anticipating development that might have an important impact on the organization. The opportunities attribute to changes in the environment, and it is important for the manager of the firm to analyze and evaluate whether they might contribute to success or not. Some examples of opportunities are economic climate, demographic changes, market and technology. However, the opportunities can possibly involve risk and therefore constitute a threat, e.g. environmental development can on one hand be a competitive activity, channel pressure, demographic changes or politics. On the other hand could also constitute an opportunity, depending on the company’s strengths. (Kotler, 1999)

The strengths and weaknesses in the SWOT-analysis are referring to the critical affect that they have on the organization’s success. Nevertheless, the measurement with these two tools is relative and not absolute. This implies that the company can always be good at something. However, if a competitor is better at it, it becomes a weakness. Hence, it is important for a company to recognize its strengths and weaknesses by e.g. being aware of the message and reputation that the brand name is sending out. (Kotler, 1999)

6 Strengths, weaknesses, opportunities and threats.
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Organizations are advised to take strategic actions to preserve or sustain strengths, offset weaknesses avert or mitigate threats, and capitalize on opportunities. Zack (in Choo & Bontis, 2002) further describes the SWOT-model as a basis for elaborating a knowledge strategy, analysing the position of the company in order to facilitate the understanding of its advantages and weaknesses. By identifying the capabilities and knowledge-based resources that make the organization unique and inimitable, and at the same time be aware of its weaknesses, it will be easier to support the weaknesses and defend the market position through strategic actions. (Barney, 1991, in de Wit & Meyer, 2002; Zack, in Choo & Bontis, 2002)

2.2. The hermeneutic approach

Regarding the scientific approach of this study we consider us to be closer to the hermeneutics, than other approaches. We do however, not imply that we are strictly hermeneutics, but rather that we have certain characteristics of it. Therefore we will introduce this approach and explain our similarities with it.

The hermeneutic approach is characterized by interpretation. The interpretation includes all from decoding conventions to understanding the life situation of another human being. When performing the interpretation it is a constant change between the parts and the total picture. (Wallén, 1996) The parts can not be understood without the totality and vice versa. (Alvesson & Sköldberg, 1994). The possible conflicts between the parts and the totals are also illuminated. It is vital to be aware of the context in order to understand a specific phenomenon within it. Pre-understanding is another important factor in the hermeneutic approach. It is however important that the researcher is aware of his or her pre-understanding regarding the area, since it will have an influence on the research and its results. (Wallén, 1996) The so-called hermeneutic spiral demonstrates the development of the pre-understanding. The development is due to the dialog with people as well as books, and will create a new, elevated pre-understanding. This is a
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continuous process that more or less never ends, since learning is a lifelong process. Hermeneutic rejects the approach of natural science and claims that a clear distinction between the natural sciences and the social sciences is crucial. This approach does not aim at finding causal connections, which is common in the natural sciences. Instead, focus is on understanding and finding a meaning with the studied phenomenon. (Andersson, 1982)

This study has some of the characteristics of a hermeneutic study. We are interpreting the empirical findings and the impact the Bologna Process may have on LiU. Furthermore, we are studying the parts, LiU, as well as the total, the Bologna Process and hence the European Area of Higher Education. The two parts are necessary in order to carry out this study, since the internationalisation of LiU is dependent on the Bologna Declaration and the declaration is depending on the participation of the European universities.

Our pre-understanding has been of great value and influence during the writing of this thesis. Since we are students at the International Business Program at LiU, we have some knowledge about how things function, as well as both positive and negative experiences and prejudices about the university. Both of us have been exchange students, and we are therefore familiar with the situations and feelings that exchange students at LiU might experience. We believe that it is important to have an international education in order to be attractive on the labour market, which is reflected in our choice of education. Moreover, we think it will be even more important in the future with the implementation of the Bologna Process.

One of us has also been actively involved in ESN\(^7\) and has been a peer-student as well. This has resulted in a valuable insight in the exchange students’ situation at LiU. The factors mentioned above, have strongly influenced the writing of this thesis. When we started to write this thesis and to read about the Bologna Process, we realized that it comprehended

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\(^7\) Erasmus Student Network is an organization that seeks to enhance the quality and reinforce the European dimension of higher education, by encouraging transnational co-operation between higher education institutions. (http://europa.eu.int, 3)
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more than we first had thought. Along the way we have gained more and more knowledge and understanding of it. This does not only include the Bologna Process itself, but also about how far the different countries have come and their opinions about it.

2.3. Qualitative study

The purpose of this study is to examine how LiU could internationalise by operating in networks, and what could characterize the other actors within the network. In order to predict or at least present possible scenarios of how such a network would function, we found it necessary to start by describing LiU’s situation today and possible future scenarios. Lundahl & Skärvad (1999) present some fundamental assumptions on what characterizes a qualitative study. They stress the importance of being aware of the pre-understanding, when the interpretation of the empirical findings is carried out. As already mentioned above, our previous theoretical knowledge together with our experiences will influence these interpretations. A qualitative research often implies studying ongoing processes and how the phenomenon studied changes over time. The researchers should have an open mind regarding the structure, the methods, approaches and changes that may occur. Instead of using the theories as a starting point it can be favourable to elaborate and evaluate the theoretical framework at the same time as the empirical data is collected and processed. (Lundahl & Skärvad, 1999)

This thesis is focusing on LiU and its future co-operations in networks. However, we believe that other universities and knowledge-based organizations can make use of the discussions and analysis as well. Our presentation of the context, that is, the Bologna Process and LiU’s situation will facilitate the use of our ideas in other organizations. A common problem with qualitative research is that it can be difficult to generalize the results. This is due to the fact that it can be hard to determine whether or not the group of people interviewed, are representative for others. However, a qualitative research often aims at emphasize the uniqueness and speciality with the phenomenon in question. (Jacobsen, 2002)
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2.3.1. Abduction

The empirical and the theoretical parts in this thesis have been developed simultaneously. However, we started out with gathering some empirical data, in order to understand our area of research. It is also the empirical findings that are the starting point for our analysis. The theories have been used to steer the research in a certain direction during the process of gathering information. Furthermore, it has not been our intention to test the theories. In our case, the theories have been used as tools to explain and evaluate how networking between knowledge based organizations could function.

Abduction implies that the empirical data, as well as the theories, are constantly developed and refined. The studying of theories at the same time as processing the empirical data can be a source of inspiration to find new ways of understanding, which is a key-word in abduction. In other words, abduction implies interpreting data that the researcher already has created some pre-understanding about. (Alvesson & Sköldberg, 1994)

2. 4. The method in practice

The collection of the empirical data and the sources used, are of great importance for the credibility of a study. Below, we will present how we planned to collect the empirical data and how we actually did it.

2.4.1. Primary and secondary data

There are various ways of collecting data, but a good starting point is to use already existing information. With the growing use and availability of the Internet, it has been easier to obtain such information. (Eriksson & Widersheim-Paul, 1999) The empirical material in this thesis consists of both the conducted interviews and information material collected through secondary sources. Since we initially knew very little about the Bologna Process and its implications for higher education in Europe, we felt that it
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was necessary to start by studying the actual process. Through reading various declarations as well as other articles and comments concerning the Bologna Process, we gained some basic understanding. The information was mainly found on the Internet, e.g. on the official homepages of the Swedish Government and the Berlin meeting. We also began at an early stage, to study the internationalization and co-operation that LiU is engaged in today and how far in the implementation of the Bologna process has come. This information was to a great extent available on the official LiU homepage and on different information sheets. Not only did this provide us with the basic knowledge about the chapter about the empirical findings. Both the factual material concerning the Bologna Process and material concerning LiU have been collected by other people and for other purposes than ours. According to Jacobsen (2002) this is the main characteristic for secondary data.

To gain further understanding about what LiU is doing regarding its internationalisation and the existing co-operational relationships, we chose to interview people who are involved in the internationalisation and co-operation processes. Some of the interviews also included questions regarding the internationalisation process on a national level. Although we had some information about these areas, we considered it crucial to have primary data as well. We thought this was important since it could give us the opportunity to get information that was not available, or indistinct, in the secondary data. The information collected from interviews is primary data, since the researchers themselves have collected it (Lundahl & Skärvad, 1999). Jacobsen (2002) stresses that information coming directly from a primary source usually can be considered to be tailor-made for the study of interest.

We believe that the use of both primary and secondary data is essential for this study. This is based on that these sources have different characters and they complement each other. It was also exiting to see if the two of them corresponded to each other or not. We hereby got the opportunity to investigate whether or not the information on the Internet and on the homepage of LiU corresponded to the respondent’s understanding of it. Jacobsen (2002) points out that on one hand, the
primary and secondary data can support each other, but on the other hand, they can also be contradictory.

### 2.4.2. Planning and preparation of the interviews

As mentioned above, we collected one part of the empirical data to this thesis by performing interviews. We believe that this method was the most suitable for the purpose of the thesis. The reason for this is that there is not much information written about the Bologna Declaration’s implementation at Swedish universities. We therefore wanted to interview various people who are involved in areas that the declaration concerns, in order to get different opinions and perspectives about this subject. Furthermore, some respondents had specific knowledge about the Bologna Declaration because of their profession. These respondents thereby contributed with very valuable information. It was also interesting to see how much the respondents really knew about the Bologna Process and to listen to their thoughts about it. The decision to carry through interviewees is also supported by the fact that the research has a qualitative character. According to Wallén (1996) performing interviews is a good way of finding out people’s thoughts and opinions regarding a certain issue.

When creating the interview guide, we identified some comprehensive topics and then formulated questions in accordance with these topics. The questions we asked were adjusted depending on the respondent’s degree of connection, and awareness of the topics. Therefore the questions to the respondents varied, even though many of them were manifested in several interviews. The reason for asking some of the questions to several respondents was to receive more information and different point of views. This was also done to help us gain a more profound analysis. Furthermore, most of the questions were broadly formulated in order to give the respondents a free scope to discuss and illuminate aspects they found particularly important and interesting. This is often a good alternative when performing qualitative research. Since there were no given answers the questions can be described as open (Arbnor & Bjerke,

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8 See appendix 1 for the interview guide.
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1994). The interviews can thereby be described as semi-structured in this given context. (Lundahl & Skärvad, 1999)

We sent the interview questions to the respondents in advance, so they had the possibility to read them through, and reflect upon them in tranquillity before the interview. The exchange students, however, did not get the questions in advance. The reason for this, as mentioned above is that we simply asked them the questions when meeting them at the university.

2.4.3. Selection of respondents

The selection of respondents has been an evolving process throughout the work with the thesis. Our tutor Jörgen Ljung initially suggested persons he thought could be suitable to start our research with. We were not familiar with the people responsible at LiU for the issues of our concern, and we therefore got a good start by following his advices. However, we found some of the respondents ourselves when searching the LiU homepage, since their names appeared in connection to the documents of our interest. We became aware of other respondents thanks to suggestions and recommendations during the interviews performed. Sometimes when we took the introductory contact with a potential respondent, he or she suggested someone else with greater knowledge and insight in the subject than him/herself. Jacobsen (2002) calls this method of selection the snowball method. It implies starting with one or few respondents and through them gets suggestions about others, who also suggest others, and hence, the snowball is rolling. However, this method is demanding and difficult to apply, since there is no guarantee that the persons suggested will be useful. We do think that we have managed to use the snowball method well and successfully. This is based on that the suggestions and ideas we received turned out to be very valuable.

Additionally, we thought that it would be interesting to get the opinions of the exchange students at LiU, to understand why they had chosen to study at there. Furthermore, we wanted information about their thoughts of their stay at LiU. The number of questions to the exchange
students were less, and not as comprehensive as in the other interviews\(^9\). The purpose with this was that we wanted short and easily comparable answers from this group of respondents. Nevertheless, by adding this perspective, we felt that our study would be more complete. We base this on our opinion that people who come to LiU from outside, have a different perspective of the university, and can notice other strengths and weaknesses than the people who have worked there for several years. The exchange students were not selected in any special way. They got picked out randomly when we met them at the university. We also sent e-mails with questions to former exchange students who we knew personally, and who we thought would give honest answers.

The number of respondents was not decided in advance. The reason for this was that our aim with the interviews was to get a deeper understanding and knowledge about the Bologna Process and its effect and implementation on LiU. We therefore interviewed persons until we felt that we had sufficient information for our purpose. We carried out a total amount of 17 interviews. The respondents are listed in the bibliography and are as well briefly presented in the introduction to chapter 4.

### 2.4.4. Carrying out the interviews

As an introduction to each interview, we introduced our selves and our purpose with our study. Lantz (1993) is of the opinion that it is crucial for the authenticity of the interview that the respondent knows the purpose of it is. The interviews were then carried out by the two of us, in order to avoid misunderstandings, and to be able to discuss and analyze them afterwards. Furthermore, we had decided the distribution of work in advance. The work was divided so that one person asked the questions and the other took complementary notes. Lundahl & Skärvad (1999) think that this is an important measure when doing an interview, in order to get a hold of as much information as possible. The interviews were carried out in both Swedish and English, depending on the origin of the respondent. We used a tape recorder during all of the interviews

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\(^9\) See appendix 1 for interview guide to the exchange students
except for the ones with the exchange students. In the cases when the tape recorder was used, the respondents gave us their approval of using it. The tape recorder was used in order to avoid missing out any crucial information, and to facilitate the processing of the information afterwards. However, using a tape recorder is not a comprehensive method, since the body language during the interview is not possible to recreate (Ekholm & Fransson, 1994). On the other hand, the tone of voice and the emphasis of certain words can be distinguished and preserved with help of a tape recorder, and we consider these issues to be valuable in the interpretation of the interviews. As recently mentioned, the tape recorder was not used during the interviews with the exchange students. This was due to the fact that we had only prepared a few questions for them. Moreover, their answers were short and therefore easy to write down.

At the end of each interview we asked if the respondent had any complementary comments that he or she wished to discuss. We also asked the interviewees if we could use them as sources in our thesis, which no one objected to. However, some of them wanted to read the thesis through before printing it, to avoid misunderstandings or misquotations. Concerning the anonymity of the exchange students, we did not feel that it was relevant to present them by name. The reason for this is that we wanted to see if there were any trends or similarities in their motives for choosing LiU.

2.4.5. Processing the obtained material

We started the processing of the information gathered thorough interviews by writing them down carefully. This was done as soon as possible after the interview, since we are of the opinion that it would be easier with the interview still fresh in mind. After that, we made a second processing of the answers, picked out the things we found most relevant, and organized the various points of views of the respondents. We think that it is important to account for all the perspectives that have emerged during the interviews, and we have therefore tried to demonstrate them in way that shows all perspectives of the given subject.
Methodology

As recently mentioned, some interviews were carried out in Swedish and other in English. We have tried our best to translate the Swedish interviews into English, to get as close as possible to original language. Moreover, the respondents who wished to read through the material have got the possibility to do that, and they have improved of it.

2.5. Reflection over the chosen method

Here we will reflect upon our choice of method and critically evaluate it. We think it is of great importance to do this, since it will give the reader an opportunity to get acquainted with our flaws and strengths with using these methods. It will also serve as a determinant of the credibility of this thesis. To facilitate the process of understanding for the reader, we have chosen to use the concepts of validity and generalization. We will also critically evaluate the different sources we have chosen to use. The sum of these given factors, will determine the credibility of this thesis.

2.5.1. Validity

According to Eriksson & Widersheim-Paul (1999), validity means measuring the things that are supposed to be measured. In our case the measuring is constituted by obtaining answers from the interviews conducted, and hence being able to fulfil the purpose with this thesis. The choice of making interviews, gave us the possibility to follow up the respondents answers by asking additional questions. Furthermore, we could ask the respondents to clarify their answer, if we did not understand suspected that the respondent had misinterpreted the question. The information gathered through the interviews is reflecting the reality through the eyes of the respondents. However, it is impossible for us to tell whether or not this is a “universal truth”. This was nevertheless our intention, as the thesis is dealing with LiU’s relation to the Bologna Process. By this we do not mean that it will not be possible to apply our discussions and conclusions on other universities, but simply that it is important to know the context of the research. We could not control the
answers received by e-mails from the exchange students. Nevertheless, we believe the answers to be true, since we see no reason for why they should to lie or make them up. In these interviews English was spoken. Despite that English is not our mother language, and in some cases not the respondents’ mother language either, we do not think that it has created any appreciable problems, or have influenced the interviews in a negative manner. We are therefore of the opinion that our choice, to carry out personal interviews and using relevant secondary data, gives this study a high validity in comparison to other method available.

Finally, we will illuminate another problem that interviews can cause. The respondents gave us permission to use their name in the thesis. We were also allowed to record the interviews with them. However, this procedure can contribute to that information which has a negative impact on them or on colleagues, could be left out. (Ekholm & Fransson, 1994) However, we got the impression that the respondents answered honestly to our questions. The majority of them were both critical and hopeful about the future of the Bologna project. Nevertheless, we can not say for sure that they did not leave out information.

2.5.2. Criticism of the sources

There is a possibility that the some of our respondents have been influenced by the fact that they are working at LiU. There is also a chance that we have been influenced by the university as well, since we are studying there. However, we got the impression that the respondents answered honestly to our questions, mentioning both strengths and weaknesses of LiU. Furthermore we think that it can be positive that we are students there, because it makes it easier for us to see whether or not the university fulfils its commitments.

The information about the Bologna process is gathered from official documents, such as the various declarations, governmental investigations and other information. This is information was available on official homepages such as the Ministry of Education and Science. Because of these sources official status, we believe that they have a high degree of
trustworthiness. Referring to the information obtained from the LiU´s official homepage, we are well aware that the much of it is used in a commercial purpose. However, some information used is based on official documents such as the annual report and different strategy documents. We therefore are of the opinion that this material contains a relatively high degree of trustworthiness. However, one weakness when using the Internet as a source is that there is no built-in quality control. Keeping this in mind, it is therefore important for the researcher to discuss whether or not the information is completely reliable. (Eriksson & Widersheim-Paul, 1999)

The literature used in the frame of references is selected in order to give a broad picture of the research, to support the result of our study, and to understand the empirical data. The selection of theories is based on our knowledge concerning this subject, which we received through a strategy course at LiU. The course gave us insight about our subject and illuminated well known authors within the area. This served as a good starting point. Then we continued by searching different databases in order to find articles and research reports that suited our subject even better. The literature found guided us to other articles and literature. The literature selected constitute of original sources, in order to avoid other authors’ interpretations of the original information.

2.5.3. Generalization

We have been interviewing various persons that have contributed a lot to our understanding of the Bologna process. Furthermore, it has given us a picture of how the situation is in Sweden and at LiU, concerning the subject. We have, as mentioned before, made interviews until we felt that we had enough information to come to relevant conclusions. According to the authors Eriksson & Widersheim-Paul (1999), there are only few investigations that contribute to a common universal knowledge that is long-lasting. However, we believe that various universities, with the main emphasis on the Swedish ones, can assimilate information in general from this thesis. One example of this can be our discussions of how a network should be handled and how to make it sustainable. Furthermore,
we are of the opinion that other foreign universities can get a clearer picture about how Swedish universities work and how to handle co-operations with them.

We have now been presenting our methodological choices concerning the conduction of this study. This ought to have provided the reader with a better understanding of how we have processed the empirical and theoretical data used, and hence give this thesis a high credibility. We will continue by introducing the Bologna Process and its implications in the next chapter. This will provide an understanding of the context of this thesis, and serves as a base for explaining the empirical and theoretical chapters.
3. The Bologna Process

The Bologna Process has the purpose of harmonising the higher education in Europe. It includes various declarations, conventions and communiqués elaborated during almost ten years. However, the Bologna Declaration of the 19th of June 1999 can be seen as the foundation, even though it was preceded by other declarations. (http://www.bologna-berlin2003.de, 3) Hence, in this chapter we will describe these declarations in order to make the reader familiar with the concept of the Bologna Process, and the declarations that have served as a base for it.

3.1. The Lisbon Convention and the Sorbonne Declaration

The Lisbon convention was elaborated during a meeting between the European Council and UNESCO in 1997. The base for this convention was a pre-existing EU convention, which contained a common ground for the recognition of higher education degrees for professional purposes. The recognition of education as a human right was also decided to serve as a base for the Lisbon convention. Moreover, it was stated that advanced knowledge is a valuable asset for the society, since it creates confidence among people and nations. A number of basic requirements regarding the recognition of the qualifications of higher education were also elaborated. Furthermore, it was decided that the individual countries should further develop these requirements in their desired direction. (http://www.bologna-berlin2003.de, 1)

Based upon the ideas of the Lisbon convention, the Sorbonne Declaration of 25th of May 1998 can be considered the first step towards a harmonisation of higher education in Europe. The Ministers of Education of Italy, France, Germany and the United Kingdom signed the declaration. It stresses that the European process of collaboration across borders should involve a European area of higher education. The focuses of the Sorbonne Declaration were upon a common degree level system for
undergraduates and graduates\textsuperscript{10} and the enhancement and facilitation of the mobility for teachers and students. (http://www.bologna-berlin2003.de, 2)

\section*{3.2. The Bologna Declaration}

29 European Ministers in charge of higher education signed the Bologna Declaration on the 19\textsuperscript{th} of June 1999. The signatories included all the EU and EFTA\textsuperscript{11} countries as well as several of countries in Eastern Europe. Hence, the Bologna Process is not exclusively for the EU members, but for the whole European continent. The declaration is not binding by international law, which implies that the signatories are not forced to implement it. However, it discusses issues that are parts of other legislation e.g. the directives of the European Community concerning acknowledgement of diplomas. Furthermore, it discusses the Lisbon Convention concerning the acknowledgement of certificate of higher education in the European region. The main implications of the Bologna Declaration are a common grading system\textsuperscript{12} and similar lengths of the educations for obtaining a bachelor, master and a doctoral degree. (http://utbildning.regeringen.se, 8)

The various commitments included in the Bologna Process are to be implemented by the signatory countries by the year of 2010. The ambition is to create a high quality European Higher Education Area, and that students and teachers can move easily within the area and enjoy recognition of their qualifications. At present there are a great number of educational systems in Europe. These systems do not only reflect the education itself, but also national aspects of culture, society, religion, politics, philosophy and economy. All of these assets should be carefully considered and preserved within the Bologna Process. This process is the most important and comprehensive reform of higher education in Europe, since the foundation of the EU. (http://www.bologna-berlin2003.de, 3)

\textsuperscript{10} The translation into today’s Swedish system is: undergraduate = bachelor degree and graduate = master and doctoral degree

\textsuperscript{11} European Free Trade Association

\textsuperscript{12} The grading system will be the European Credit Transfer System, shortened ECTS. The system will be explained in 3.5.
The Bologna Process

In order to follow through with this reform, three goals have been elaborated as a base for the Bologna Declaration. The goals are the following ones: (http://utbildning.regeringen.se, 8):

1. Promoting mobility for students, teachers, researchers and administrative staff
2. Promoting employability
3. Promoting the competitiveness and attractiveness of Europe as an area of higher education

These comprehensive goals are further divided into six operative goals (http://utbildning.regeringen.se, 8):

1. The introduction of a system with plain and comparable diploma
2. The introduction of a common system essentially based on two levels of degrees; undergraduate and graduate.
3. The introduction of a common grading system
4. Promote the mobility of students, teachers, researchers and administrative staff, by overcoming existing obstacles
5. Promote European co-operation on quality guarantee
6. Promote the European dimension of higher education

3.3. The Prague Communiqué and the follow-up meeting in Stockholm

The follow-up meeting of the Bologna meeting took place on the 19th of May 2001 in Prague, and resulted in the Prague Communiqué. The communiqué had the purpose of deepening and developing the objectives of the Bologna Declaration and to set directions and priorities for the coming two-year period. By the end of this meeting the number of signatory countries was 32. The Ministers were contented to learn that the objectives of the Bologna Declaration had been widely accepted by the signatory countries, as well as the institutions of higher education. (http://utbildning.regeringen.se, 1)
The Bologna Process

Three important elements for the European Higher Education Area were discussed at the Prague meeting. They concerned lifelong learning, involvement of students, and enhancement of the attractiveness and competitiveness of the European Higher Education Area. Another area of interest was the development of joint degrees, which was further discussed at a meeting in Stockholm a year later. (http://utbildning.regeringen.se, 2)

The Stockholm meeting was preceded by a questionnaire regarding the signatory countries point of views on the development of joint degrees. The conclusion was that a joint degree is a degree that is jointly issued by at least two seats of learning in two or more countries. The joint degrees should also be in accordance with the countries legislation respectively. Such a degree ought to be characterized by e.g. both student and teacher exchange and mutual planning of the courses or programs. There was an overall agreement that the implementation of joint degrees is an essential tool in order to fulfil the goals of the Bologna process. A joint degree will contribute to an increased mobility among students, teachers and researchers. Furthermore, it will facilitate the employability, contribute to a higher quality of the higher education and strengthen the competitiveness of Europe. (http://utbildning.regeringen.se, 2) The majority of the participating countries also found joint degrees applicable in both general and professional degree fields. Nevertheless, they also acknowledged that there could be difficulties with the regulated professions. Hence, an agreement was reached that attempts should be made in order to decrease the density of the regulations. (http://utbildning.regeringen.se, 5) Many of the conclusions of the Stockholm meeting were used as starting point for discussion at the following Berlin meeting. (http://utbildning.regeringen.se, 3)

3.4. The Berlin Communiqué

The latest meeting regarding the Bologna Process and its implementation took place on the 18th -19th of September 2003. During these days the Ministers in charge of higher education in the signatory countries met in Berlin to discuss the development since the last meeting and make future
The Bologna Process

plans. There were also a few countries present at this meeting that had not yet signed the Bologna Declaration. After the meeting a total number of 40 European countries had signed the declaration. (http://utbildning.regeringen.se, 4) The main outcome of the Berlin Communiqué was that the countries in the next two-year period will prioritise three aspects (http://utbildning.regeringen.se, 6):

1. A national system for quality assurance as well as common standards, procedures and guidelines for quality assurance.
2. Having started the implementation of the two-cycle system\textsuperscript{13}
3. The recognition of degrees and period of studies, through the Diploma Supplement\textsuperscript{14} and a ratification of the Lisbon Declaration

The quality assurance is considered to be the heart of the creation of a European Higher Education Area. It is the institutions themselves that have the final responsibility for the quality assurance, in accordance with the institutional autonomy stressed by the Ministers. However, in order to make sure that all countries use the same quality criterion, the Berlin Communiqué set the framework for what the quality assurances should include. (http://utbildning.regeringen.se, 4):

- There must be a clear definition of responsibilities for the bodies and institutions involved.
- An evaluation of programmes or institutions, including internal assessment, external review, the participation of students and the publication of results must be carried through.
- The third point concerns a system of accreditation, certification or comparable procedures.
- The last point stresses the importance of international participation, co-operation and networking.

Furthermore, the Ministers agreed upon trying to increase the attractiveness of the European higher education institutions. To reach this

\textsuperscript{13} The cycles concerned undergraduate and graduate degrees. There was also a proposition that the research education (doctoral degree) was to be considered a third cycle.
\textsuperscript{14} The Diploma Supplement will be further explained in 3.6.
goal, the Ministers stress the importance of that research at the universities ought to reflect the technological, social and cultural evolution as well as the society’s needs. Moreover, the co-operation between institutions regarding the doctoral studies and the training of young researchers should be encouraged. This type of co-operation, should be supported both financial and by the national Governments and the European Body. At the next meeting in Bergen, Norway in 2005 each signatory country will present a national report. This report shall describe how far countries have come in the process and what progresses that has been made. (http://utbildning.regeringen.se, 4)

3.5. ECTS

Below, we will provide a brief presentation of what the ECTS system includes and implies. First we introduce the credit system, followed by the grading system, and finally the ECTS label.

3.5.1. The ECTS credit- and grading system

The ECTS system includes, as recently mentioned, both the credits and the grades obtained at the universities. The Bologna Declaration stresses that the credit system will be compulsory for the undergraduate and graduate educations\textsuperscript{15} as well as for the doctoral educations. One week of full-time studies will be worth 1.5 ECTS credits, and consequently 60 ECTS credits per year. (http://utbildning.regeringen.se, 7) Full-time studies according the ECTS system include the time for lectures and seminars, independent studies, and the examination (http://europa.eu.int, 1).

The ECTS grading system is divided into seven grades\textsuperscript{16}, were A is the highest and FX the lowest. F and FX signify failed. However, a student who receives the grade F or FX, will be given the possibility to supplement it, in order to pass the course. (http://europa.eu.int, 1) Unlike the ECTS credits, the grading scale is not compulsory. This implies that the

\textsuperscript{15} The undergraduate and graduate degrees will be explained further in chapter 3.6.1

\textsuperscript{16} The grades are: A, B, C, D, E, F and FX
The Bologna Process

universities can use a different grading system if they want to, even if the country has decided to use the ECTS grades. (http://utbildning.regeringen.se, 7)

3.5.2. The ECTS label

The European Commission has decided to introduce a quality label for the universities, the so-called ECTS label. The label signifies that the university has an international standard on its educations. It will further function as an incentive for the higher education institutions to constantly strive towards a better quality standard. The stipulations for obtaining the label contain two main areas: the course catalogue and the academic recognition. Within each area there are a number of specific conditions. (http://www2.staff.fh-vorarlberg.ac.at) Concerning the course catalogue the main condition is that it must be translated into two languages. Furthermore, the university must use the ECTS credits. (http://europa.eu.int, 1) The first ECTS labels will be issued in the beginning of 2004, and the number of European applicator universities are around 300 (http://www.socleoyouth.be). The validity for the label will be three years. During this period, visits from the ECTS Counsellors will be undertaken, in order to control that the requirements set are being kept. (http://www2.staff.fh-vorarlberg.ac.at)

3.6. Sweden’s position in the Bologna Process

The Swedish universities have an extensive international co-operation within the undergraduate and postgraduate studies but also within research area. The mobility of students, teachers, and researchers are promoted through several international projects and exchange programmes. These international connections and experiences are of course of great value themselves, but they also contribute to a higher quality and enrichment of the education and research. (http://utbildning.regeringen.se, 8)
The Bologna Process

The Swedish government, mainly the Ministry of Education and Science, is currently investigating how Sweden is going to deal with the different areas of the Bologna Declaration. Concerning the degree structure, a review group is currently working with the translation and formulation of the degrees and the degree titles. The Swedish credit system and grading scale are also under translation to the ECTS standard. (http://utbildning.regeringen.se, 9) According to the Swedish legislation, ECTS grades are the main alternative for grading. Despite this, it is possible for the universities to use another grading system. (http://utbildning.regeringen.se, 7)

One measure taken by the Swedish Government is the introduction of the Diploma Supplement\(^1\). This diploma has its origin from a joint initiative by the European Commission, the European Council and UNESCO. The Diploma Supplement is an attachment to the graduation certificate, and is describing the educations formulation, its content and its level. Furthermore, it will also inform about the national system for higher education in order for e.g. a future employer to be able place the graduation certificate in its right context. (http://utbildning.regeringen.se, 9) The Swedish universities have been among the first in Europe to implement the Diploma Supplement (Lundquist).

3.6.1. The degree system: undergraduate and graduate

The degree system will be divided into two main cycles, undergraduate and graduate level plus a possibility to continue with a doctoral degree\(^1\). A common misunderstanding throughout Europe is that the cycles are to be inexorably 3+2+3 years.\(^1\) The reality is that the first cycle must be at least three years, and it has to be completed in order to gain access to the second cycle. The second cycle should lead to either a master or a doctoral degree. The length of this cycle depends, on the degree that is to be obtained. To receive a master degree a minimum of one year is stipulated,

\(^1\) From the 1st of January 2003 it is a compulsory attachment to the graduation certificate. See appendix 2.
\(^1\) In Swedish: grundnivå, avancerad nivå och forskarstudier.
\(^1\) Also called 3-5-8.
The Bologna Process

and to receive a doctoral degree a minimum of three years is required. (http://utbildning.regeringen.se, 10)

The Swedish Ministry of Education and Science presented the propositions regarding how the Swedish two-cycle system should be designed at a hearing in Stockholm, on the 26 of November 2003. It will contain three levels: undergraduate, graduate and doctoral studies. However, the division between the levels is proposed in two alternative solutions. The first alternative is that all fundamental higher education shall be divided into two cycles. This alternative will include a compulsory division of all degrees that presently contain a minimum of 160 Swedish credits\(^{20}\) into three years and a least one additional year. The undergraduate degree will be necessary in order to have access to the graduate level. The graduate level has to, as recently mentioned, be least one year. The second alternative is similar to the first, except regarding the vocational degrees. This alternative suggests that the vocational degrees should not be affected by the two-cycle system. Instead there will be no division into different levels, but parts of the education must be on an advanced level. The second alternative embraces the first, but not vice versa. The final report regarding the formulation of the alternatives will be presented in the end of February 2004. (http://utbildning.regeringen.se, 11)

\(^{20}\) Correspond to 180 ECTS credits.
4. Empirical Findings

In this chapter we will present our empirical findings. We have chosen to present them before the theoretical framework. This is done in order to facilitate the assimilation of the information for the reader. Furthermore, we believe that this disposition also will make it easier to understand our choice of theories. We also think that this organization of the thesis illuminate our course of action. As mentioned in our method, we are have started out from gathering empirical data, and then continued to search for theories and new empirical data and so on.

To make the structure of our thesis clearer, we have chosen to demonstrate the main parts in figure 1 that will be presented through the remaining part of the thesis. This model is created, to help the reader to follow the structure of the thesis, and to understand the empirical studies better, through getting a hint what is about to come. The box that is marked by extra bold type, is the box that we will present in the chapter and the other boxes show the subjects that will be treated later. As figure 1 demonstrates below, the Bologna Process will effect the higher education and hence LiU. Since Sweden has signed the Bologna declaration, it will become reality. Therefore it is the starting point for searching appropriate internationalisation strategies, as the second box shows.

![Figure 1](image-url)

*Figure 1* A three step model for explaining the structure of the thesis, step 1. (Own construction, 2003)
Empirical Findings

The information in this chapter is gathered through interviews and secondary sources. In some sections of this chapter the latter sources are dominating. We will therefore, once again, point out that these sources are mainly produced with the purpose of marketing LiU. Nevertheless, we have chosen to use them in order to show how LiU wants to be seen, and how it apprehends itself as a university. Moreover, we base this chapter on our experiences and observations obtained by being students for five years at LiU. This has particularly influenced our view of the teachers’ and the researchers’ roles. In this thesis we define teachers as the ones who give lectures and the researchers as the ones who are doing the research. We are aware of that in the reality they can have double roles, which can be difficult to separate.

The interviews represent the biggest part of this chapter, and we therefore find it important to give a short description of the respondents. This is done to let the reader becomes familiar with them. Furthermore, we believe that their answers and statements will be better understood if we give a brief presentation of them. This is also done to give the thesis a higher credibility.

- **Ingrid Axberg-Ahlsson**: She is co-ordinating the interchange between the Institute of Technology at LiU and its partner universities.
- **Fiona Goss**: Works at the department of Business and Management at the Business School at University of Portsmouth, U.K, as course director.
- **Louise Kihlborg**: She works at LiU as an international student co-ordinator. She is also the chairwomen of ESN Sweden.
- **Janerik Lundquist**: He is an ECTS-counsellor appointed by the European Commission. Janerik is also working part time at LiU as a lector and student advisor concerning the exchange at the Institute of Technology.
- **Mille Millnert**: He became vice-chancellor at LiU the autumn of 2003. Mille Millnert is the university’s top executive official, appointed by the Government.

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21 Sweden has two ECTS-counsellors, and both are working at LiU.
(http://europa.eu.int, 2)
Empirical Findings

- **Lars Rydberg**: He is the chief of planning at LiU, and he takes part in national meetings concerning the implementation of the Bologna Declaration at Swedish universities.

- **Margareta Sandewall**: She has worked at the International Secretariat at LiU for several years and she was involved in the creation its first exchange programs. Today she works at International Program Office, in Stockholm, with questions concerning teacher and student mobility.

- **Ten exchange students**: These persons have been chosen by random at the university in order get outsiders point of view of LiU. We thought it would be easy for them to see the strengths and weaknesses of the university, when comparing it with their home university.

We will now start with presenting the networks and co-operations that LiU is involved in. Then, we will continue with describing the internationalisation of the university, which also includes cultural aspects of it. After that, we will move on to the section that describes how the Bologna Process affects LiU. In this section the teacher and student mobility will be handled together with ECTS-system. Finally, different aspects of why LiU should be considered unique are presented. This last presentation is composed by LiU’s history, exchange students opinions about LiU as a university and its marketing.

### 4.1. LiU’s networks and its internationalisation

LiU is involved in many networks, and co-operates with several universities all over the world. In this section we will therefore illuminate different aspects of these networks and co-operations in an international perspective. We will also describe how they are built and different contexts that might affect them.

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22 Internationella Programkontoret in Swedish.

23 We will mainly focus on the Faculty of Arts and Science and the Institute of Technology. The Faculty of Health Sciences will get less attention. This is due to the fact that the majority of the educations at the latter faculty will not be affected by the Bologna Process since they lead to regulated professions.
4.1.1. LiU’s networks – past, present and future

"I do not see them (the European universities) as competitors, it is co-operation that counts." 
Ingrid Axberg-Ahlsson

Academic life is by nature international and the networks created by researchers and teachers in Linköping have always been global. The Faculty of Arts and Sciences has a long tradition of internationalisation and over 100 guest researchers come to LiU every year in order to scrutinize its research environment. (www.liu.se, 2)

"Without their networks, the research would not be worth anything." 
Lars Rydberg

In the late 1970’s LiU established its first exchanges with the United States and Western Europe, a long time before the Erasmus programmes started. LiU was the first one of the technical colleges in Sweden that established exchanges, and The Faculty of Arts and Sciences was among the first ones as well. (www.liu.se, 2, Lundquist) Since then, the non-European network has expanded including universities in Canada and Australia. LiU has also signed agreements of collaboration with universities in Africa, South East Asia and Latin America. (www.liu.se, 3)

"International co-operation has been a trademark of the University of Linköping from its start in the late 1960s." 
Bertil Andersson (in ECTS practical guide 2002-2004, p3)

During the period of 1998-2002 LiU worked hard on strengthening its internationalisation. This work has resulted in policy document, examinations of the faculties concerning the theme and new co-operation agreements have been established. (www.liu.se, 4) Newborn linkages with the Baltic States as well as with Central and Eastern Europe have contributed to an increased internationalisation process of the university. (www.liu.se, 3)
Empirical Findings

Number of partners
The opinions of how many co-operation partners a university should have differ. If the number of partners is small, it would be easier to get to know each of them better. Furthermore, the quality often improves when having a close relationship with a few partners. (Axberg-Ahlsson, Kihlborg)

However, if a university chooses to have a limited number of partner universities, this means that it has to say no to others. The worst thing a university can do is to limit its partners and say no to those who approach. That behaviour is not in alignment with the ideas of a united Europe and the Bologna Process. Moreover, it is not a healthy development. The universities that approach LiU with the intention to suggest a partnership, they do it because they think LiU will be a good partner. Hence LiU should be as open-minded and tolerate as possible towards potential partners. (Lundquist) Furthermore, LiU does not want to be limited to have only European co-operations. Having a lot of them though, will facilitate the process of getting more partner universities in the rest of the world, through the snowball effect that the contacts create. (Rydberg)

The choice of partner
At present LiU offers an extensive number of educations and courses. Despite this large amount of courses offered, they do not cover all educational areas, which can be seen as weakness. (Millnert) This weakness is important to have in mind when choosing a partner university. In LiU’s case, its choice of partner university ought to be based on the courses offered. The partner should be able to offer courses that complement the ones at LiU. It is important to give both outgoing and incoming students the possibility to study subjects that are not available at their home university. Furthermore, the partnership should strengthen the education and illuminate other perspectives of it. (Sandewall)

Both outgoing and incoming students should get the possibility to study subjects that are not available at their university. Therefore, the characters of the partner universities can differ and the courses given there should be complementary to the education given at home.
Empirical Findings

Furthermore, the partnership should strengthen the education and illuminate other perspectives of it. (Sandewall)

Structure of LiU´s networks

“An investigation from The National Agency for Higher Education says that they are impressed by the co-operation and the co-operation climate (at LiU) which is very personal. However, this could also be a weakness.”

Lars Rydberg

The employees at LiU in charge of handling the co-ordination with the partner universities are responsible for the exchange agreements. These agreements are often built on personal relationships and hence, some of them stronger than others. The personal relationships make the work go smoother, especially if they are already well established. In general the contacts are maintained through mail and telephone, but also through visits. The visits facilitate the understanding for the partner universities and their working conditions. Moreover, visits are a sign of a close relationship. A result of this type of relationship can be that each party tries to take an extra exchange student from the partner university if necessary. However, these relationships can also be a weakness. If the people who are coordinating the exchange are too close friends, it can create problems when one part has to say no to the other. As mentioned before, it is not unusual that a professor calls a professor at the partner university and asks him to make an exception. This exception can be to accept a student to apply for LiU, despite that the deadline for applying has passed. Consequently, the person responsible at LiU gets irritated since the routines do not work as they should. This course of events might result in a change of climate of the relations, in a negative manner. (Axberg-Ahlsson)

Most of the exchange students who come to LiU get a peer student who should take care of them, show them the university and how everything works in Sweden. It is voluntarily for the students at LiU to apply for being a peer student. The purpose with the peer activity is to strengthen the bonds between the Swedish and foreign students. (Kihlborg) One of us has been a peer student during almost five years and it has worked very
well. Some of the relations with the exchange students have been durable and others have been lost, like in many personal relations.

LiU has developed Alumni activities with the aim with it is to strengthen the bonds between former students, the university and the surrounding world. This is done through a record of names and addresses, but also thorough a virtual meeting place on the Internet. This activity is a possibility for the university, and former as well as present students, to develop a relationship characterized by life-long learning. (www.liu.se, 5)

After having presented LiU´s network we will now continue with describing its internationalisation process. First, we present various opinions whether or not LiU can be considered to be an international university. Then, LiU´s adjustment to foreign students will be handled. Thereafter we will illuminate problems that the internationalisation can cause and measures to some of them. Finally, cultural aspect on the cooperation and internationalisation will be dealt with.

4.1.2. Internationalisation

"I think we (LiU) are international, we are prominent within that area. We started our exchange in 1977.”

Janerik Lundquist

The opinions of whether or not LiU is an international university fail to tally. One interpretation of the word international implies that it ought to be more than one foreign teacher and researcher in each educational area at LiU. With this definition, LiU as a whole fails to be labelled as an international university. (Sandewall)

"One is not international just because reading a lot of foreign literature. There has to be an inflow and an outflow of people, physical mobility. That can never be replaced."

Margareta Sandewall

24 In Swedish Alumniverksamhet
LiU offers a large number of courses in English throughout all faculties in order to make it possible for non-Swedish speaking students to enrol. (www.liu.se, 2) The Faculty of Health Sciences presents individually planned practical modules and participation in a tutorial group to the exchange students. Moreover, the Institute of Technology offers a great number of course modules, as parts of study programmes. (www.liu.se, 6) There is also a possibility for foreign students to choose from a wide range of one-year courses at the master's level. At present there are five programmes offered in English; Science, Technology and Society, Adult learning, Applied Ethics, International Relations and Business Management. The English courses taught at LiU provide an opportunity for the Swedish students as well to broaden their international horizons. Furthermore, the Swedish students are given the possibility to participate in an exchange programme. (www.liu.se, 3)

The exchange students coming to LiU are offered an intensive beginner's course in Swedish. (www.liu.se, 3) The course consists of three levels, of which the first level is free of charge and the other levels are not. (www.liu.se, 7) The international students with good knowledge of Swedish are given the possibility to choose courses at the university that are given in Swedish as well. (www.liu.se, 8)

Problems and measures
The ability to change depends to a great extent on what the society looks like. The labour market and the possibilities for the universities to receive more students are some of the decisive factors that affect the possibilities to change. If a university is to change its structure, it can result in student demonstrations against it. This course of event might affect other countries, in the sense that they choose not to carry through too extensive changes. (Sandewall)

The competition that the Swedish universities are presently exposed to will be tougher as a consequence of the implementation of the Bologna Process. The European universities will get a similar structure and the comparison between them will consequently be easier. In order for a university to keep its position, it is necessary that it offers top quality educations, which are better in comparison to others. It is easy to get a
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decrease in this quality through handling small things in a bad manner. This can result in dissatisfaction among students and they might start to spread a bad reputation of the university. In order to prevent this it is important to be a good listener, and discover the problems at an early stage and deal with them. (Lundquist)

As a result of the long tradition of internationalisation at LiU, there is preparedness for going further in this process. This can be seen as a strength that LiU possesses. (Lundquist) Furthermore, LiU keeps a high quality standard on all its educations, courses and programs (Millnert). However, the quality can be improved by offering more courses in English. Today the Faculty of Arts and Sciences at LiU has got a lot of barriers and limitations concerning some of the courses given there. The exchange students studying at the Faculty of Technology are not allowed to study courses at The Faculty of Arts and Sciences even though they want to. These limitations might be a result of a lack of resources, but it can also be seen as an attitude issue. However, this is something that has to be worked on and improved further at LiU. (Lundquist)

Cultural differences
Some of the co-operational relationships at the Institute of Technology work better than others. In general, the ones that are working the best are those with partners from northern Europe. This is due to the fact that they have a similar culture to the Swedish one. It is more difficult to cooperate with universities in Southern Europe because of their “Latin way” and their attitudes. Other cultural problems are the differences when the semester starts in Europe, which make the applications and the coordination between the universities difficult. (Axberg-Ahlsson) Cultural differences can also be noticed within the same country and within the same university as well. Educations and faculties have different cultures and abilities to change. Moreover some of them are more international than others concerning their amount of international teachers. (Sandewall)

The recent acts of terror have created a decrease of students going to the United States. Students from the Middle East chose not to go there, since they can get in trouble with all the controls. Another reason not to go is
that the time span to get a visa can be very long, and it is easier to go to another country instead. These exterior factors were impossible to predict and they have affected the students’ preferences concerning their choice of country. However, if Europe remains peaceful and safe, it has a lot of future opportunities. (Sandewall)

After having described LiU’s networks and relationships together with its internationalisation process, we will next take a closer look at the implications for LiU concerning the Bologna Process.

4.2. LiU and the Bologna Process

There is a great difference between the European countries in terms of how far they have come concerning the implementation of the Bologna Process. Sweden belongs to the countries that have not been very active in this process, and that have not carried through much structural changes at their universities. This depends to a great extent of the lack of political decisions and guidelines. When it comes to LiU, the university can be seen to be in the middle in comparison to the other universities in Sweden, concerning the implementation of the Bologna Declaration. (Lundquist, Millnert) Hence, in this section we will present how far LiU has come in the implementation of it and what needs to be done. This will be done in terms of student and teacher mobility, as well as the degree system, the ECTS credits and ECTS grades. We will also describe the problems related to each of these subjects, possible solutions to them, and future prospects.

4.2.1. Student mobility

The student mobility can be described both in the number of students who are going abroad to study and the number of foreign students who are coming to Sweden. We have chosen to present some statistics of this\textsuperscript{25}, in order to make it easier for the reader to understand what LiU’s position is, in comparison to other Swedish universities.

\textsuperscript{25} See appendix 3
Empirical Findings

Outgoing students
During the period of 2001 and 2002 the number of Swedish students going abroad to study has decreased. It has not decreased by much, but it is a notable decline.\textsuperscript{26} There are several possible explanations for the decline. One of them is the tightening-up of the study allowances that CSN\textsuperscript{27} did a few years ago. The new system has made the students more careful concerning studies abroad. Other reasons may be that the students are insecure how to get their chosen courses approved at their Swedish university. In other words, they are afraid that the time spent abroad will be a waste, if they will not get the courses approved. Language difficulties can also be a contributing factor. It is not unusual that pupils chose not to study languages during high school, because they think it is hard to get good grades in that subject. This behaviour results in a lack of knowledge of different languages, which can be a contributing factor to the decline. (Axberg-Ahlsson) Rydberg has heard another reason to the decline:

"Some people say that our education is so excellent, that they do not want to go abroad."

Lars Rydberg

There is also a possibility that the act of terror on the 11th of September, 2001 has resulted in a fear of going abroad. (Kihlborg) Other reasons are that a lot of students do not know how to apply, the advantages that the exchange implies, or what it includes. (Sandewall) In short, there is a great need for additional information, which is lacking at many universities today. (Axberg-Ahlsson, Sandewall) The teachers play an important role in this, and they ought to inform the students and recommend them to study at a foreign university. By studying at a foreign university the students can complement their desired education area and develop themselves. (Sandewall)

\textsuperscript{26} See appendix 3
\textsuperscript{27} CSN is the authority in Sweden that administrates the Swedish study grant. The study grant consists of a subsidy and a loan which people who are studying are entitled to with some exceptions. (www.csn.se)
Empirical Findings

In the year of 2001/2002 the total amount of Swedish students at LiU who went abroad to study was 498. The number of foreign students who arrived to LiU was 632, during the same period. The distribution is shown in figure 2.

<table>
<thead>
<tr>
<th>Incoming students</th>
<th>Outgoing students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within exchange programs</td>
<td>Within exchange programs</td>
</tr>
<tr>
<td>466</td>
<td>410</td>
</tr>
<tr>
<td>Non-exchange programs</td>
<td>Compulsory exchange within a program</td>
</tr>
<tr>
<td>166</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Non-exchange programs</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td><strong>632</strong></td>
<td><strong>498</strong></td>
</tr>
</tbody>
</table>

**Figure 2** Incoming and outgoing students at LiU (Own construction, 2003, based on information in Linköpings universitet i korthet, 2003

The figures presented above have increased during the present year. The monthly report called “The latest news” shows that there has been a thirty per cent increase of LiU’s students who have gone abroad to study. This trend at LiU is the opposite in comparison with other Swedish universities, where the number of students going abroad still is decreasing. (Axberg-Ahlsson)

**Incoming students**

In the beginning of the exchange there were not many Spaniards or Italians who came to LiU. However, the numbers have increased by the years. To many Swedes’ surprise the exchange students liked their stay in Sweden, and they told their friends at home that they were pleased with their choice. The reasons for this were the reception, the attention they received, and the fact that they were taken good care of. A positive reputation was created, which resulted in that more and more students came, without any special persuasion or marketing needed. In order to keep this positive trend going, it is important to continue the good work and try to improve it further. Moreover, it is of great importance that the exchange students will get a good social life, that the courses are interesting, and that they get help to find a place to live. (Sandewall)

28 In Swedish: “Senaste nytt”
Empirical Findings

“I had the best time of my life here! Linköping feels like home now, so I will certainly recommend it to others.”

Exchange student

Recently, the International Program Office\textsuperscript{29} has started a campaign to increase the exchange within the Erasmus programme, with participants form various seats of learning. The result has been positive and it could be a reason to the increased number of foreign students who come to study in Sweden. (Sandewall) Another reason can be that an opportunity to study abroad has opened up for students from the Baltic countries, and they have shown a high interest in doing that. (Axberg-Ahlsson)

The reason why the number of incoming exchange students at LiU has increased is probably due to the increasing number of master courses offered there. (Axberg-Ahlsson) It can also be a result of that the exchange students at LiU are guaranteed a place to stay since the year of 2000. Furthermore, as just mentioned, the fact that the students are well received ought to be a contributory source for explaining the increase. LiU has got two full-time employees at the International Office, who handle the issues concerning the exchange students. (www.liu.se, 3) We have observed that the contacts between the exchange students and the International Office work well. Furthermore the contacts are very personal in many cases.

“The International Office arranges everything perfectly for students, the rooms are perfect, and I had absolutely no complaint about them (the International Office) in one year.”

Exchange student

Problems and measures

Nowadays it is easy for students to go abroad on their own. These students are called free movers. The possibilities to be free mover contribute to a tougher competition for the universities. This implies that the universities have to be able offer better possibilities for their students than the free movers got. This offer could be a quality guarantee of the

\textsuperscript{29}In Swedish: Internationella Programkontoret
Empirical Findings

education at the foreign university. Furthermore, the relations between partner universities facilitate the exchange of students. In some cases it can be impossible for a free mover to arrange a certain exchange him/herself, without the help from a university. To sum it up, the universities ought to offer something extra, in order to make the various exchange programs more attractive than the alternatives that exist for a free mover. (Sandewall)

At present there is a housing shortage in Linköping. This housing shortage implies that LiU can not receive all the foreign students who want to come, since it can not guarantee a place for them to live. This can cause problems when the students come to find a place to live themselves. A result of this is that they can become disappointed, and return with a bad impression of Sweden and Linköping. One solution to this problem can be to house the foreign students in Norrköping, as the connection to Linköping is good through the special bus service. However, the people who handle the student housing there, will not let students from Linköping hire, since the dorms are only intended for students who are studying in Norrköping. (Lundquist)

The student mobility will presumably increase in the future, both the number of incoming students as well as the number of outgoing students. (Rydberg, Sandewall) An increase of foreign students would be positive for Sweden. This is due to the fact that the majority of these students is curious about new things and brave. If the students are clever, and if they like it in Sweden, they could be recruited to the research education. It is crucial for the universities to have people that want to continue their education, especially good people. Therefore, it is of great importance to take care of the exchange students and treat them well, in order to get contact people in other universities when they will return, but also to get the clever ones to stay. (Sandewall)

“I think it will be very important for LiU to be an attractive university internationally in the future.”

Mille Millnert
4.2.2. Teacher mobility

“It ought to be normal for a person, working at a Swedish university, to participate in an exchange.”

Margareta Sandewall

The teacher mobility embraces the teacher interchange between European universities in the signatory countries. This mobility aims at improve the quality of the European Higher Education Area. (http://utbildning.regeringen.se, 8) We will now present the respondents views concerning this issue.

The teachers are fundamental at a university, since they are the ones who carry through the education and stay there for a long period of time. In order for them to further develop, it is important that they are given the opportunity to participate in exchange programs. The teacher exchange gives the students and the employees at the university the possibility to talk to and listen to people from different cultures, despite that they are not travelling themselves. However, to be able to carry through with exchange, a lot of support and effort are needed. (Sandewall)

The number of teachers going abroad has increased within the Erasmus program, (Sandewall) and the Faculty of Technology at LiU shows a similar trend. During last year there was duplication within this area at that faculty, which is important for further increasing the interest of mobility among teachers. (Axberg-Ahlsson)

“I have noticed that they (the teachers) have started to travel, especially in one institution, which I think is great. The co-ordinator is very enthusiastic about it and he has done a great job for his colleagues. The increase in teacher mobility has its origin from there.”

Ingrid Axberg-Ahlsson

The number of outgoing teachers from LiU in the period of 2001/2002 was 25, and it makes LiU the third university in Sweden regarding the teacher exchange. The University of Lund is in lead with its superior number of 65 teachers, followed by the University of Gothenburg with
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However, other Swedish universities are close upon LiU’s position. It is only a difference of two teachers between LiU’s third place and the fourth place that the University of Uppsala possesses. (www.programkontoret.se, 1)

Moreover, the number of exchange teachers who go abroad during long periods of time is not very high. They are mostly going abroad on conferences or short visits. Much more can, and needs to be done, in order to increase the teacher mobility. There is a clear difference between the teachers’ and the researchers’ mobility at LiU. The number of researchers involved in some sort of exchange is higher and their time span abroad is often longer. (Rydberg, Sandewall)

Problems and measures
One of the main problems, when it comes to teacher mobility, is the lack of time. The teachers’ schedules are often full, and going abroad does not imply an increase in salary or other kinds of benefits. (Axberg-Ahlsson, Sandewall) Furthermore, teaching at a partner university demands an extra effort. It is very time-consuming, since preparations have to be done in advance. Many of the teachers, who are going abroad, are people who are filled with fervour and think it is fantastic. It is not usual that these people will get their old job back at the university, when they are returning from their travels. This can be seen as a flaw in the system, since they ought to get a better working position when they come back. These teachers develop themselves, they work hard, and spend much of their free time on university issues, which they should be encouraged and rewarded for. The drawback with this system is that these teachers easily get overworked. In a strict sense, there should be directives from the higher authorities, concerning the teacher mobility, to prevent this. The directives should further contain demands for teachers to go abroad. It should not be on a voluntary basis, but it ought to containing exceptions for family reasons. A good idea for the university henceforth would be to demand that the people hired, should have international experiences. (Sandewall) It would also be a good idea to fit in the exchange into the teachers’ schedule. (Axberg-Ahlsson)

30 See appendix 4
Empirical Findings

It is not easy to teach in another language, and the difficulties that arise are often underestimated. In order to deal with this problem, the teachers who can and will go abroad should be encouraged. The teachers also need to be given the opportunity to speak up if they feel insecure and need language training. One measure could be to offer the people who are feeling insecure and do not dare to go abroad, to participate when another person is teaching. (Sandewall) At LiU, the faculties are supporting the teachers financially in order to encourage the teacher mobility. Furthermore, the teachers are offered English courses, with the aim to motivate them to participate in the development of new courses and programs that will be given in English. (www.liu.se, 4)

Several foreign teachers and researchers are coming to LiU every year. Unfortunately, the system does not work satisfactory. There is usually no time for them to participate in the normal teaching during their visits. Sometimes, if they are lucky, the foreign teachers and researchers have time to carry through a guest lecture. A solution to this problem could be to employ a person who organizes this and improves the information flow between researchers, teachers and students. It is important to take care of the resources at the university and utilize them well. (Axberg-Ahlsson)

The co-operation between different universities ought to be long term. Furthermore, the teachers should be in charge of establishing the first contact with a foreign university. This contact can serve as a base for the creation of a new relationship, which can lead to an interchange of teachers between the universities in question. The knowledge and insight that the teachers receive from their exchange, can be used to recommend students courses at these universities. However, the co-operation needs to be followed up, even though it might take a lot of time, to assure that the partner university keeps a high quality. (Sandewall)

If the student exchange is built on a university’s specialist knowledge within a certain area, then the teachers must trust their foreign colleagues, and believe that their teaching keeps a high quality. The knowledge the students receive should be worth the same, whether the students are studying in Sweden or in another country. Trust is therefore a very
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important factor in the relationships. There is no use to co-operate if the trust is not mutual. (Lundquist) It is also important, as mentioned before, that the university bases its partnerships on the contacts that its teachers and researchers have. The partner universities chosen should be the ones where the teachers feel that they can fit in. (Sandewall)

The teacher mobility will probably increase in the future. (Axberg-Ahlsson, Rydberg, Sandewall) If the legislation will be harmonized concerning residence and labour permit, it will facilitate the teacher exchange. It will also make it easier for the teacher’s family to join if the exchange will last for a long period of time. (Rydberg)

4.2.3. The degree system: undergraduate and graduate

There has been an uncertainty in Sweden since 1991 regarding the implementation of a common degree system in Europe. Today this uncertainty is over, since the Government has decided that the system 3+2+3 should be implemented at the Swedish universities. Many of the Swedish universities find this new system very good, as the graduate degree can vary from one to two years, depending on their preferences. (Lundquist) Furthermore, the length of the research education will be dependent on the length of the master program. However, this system requires that some educations need to change their formulation. The ones that contain 20 points thesis, have to be broken down into two 10 point thesis instead, one for the undergraduate and one for the graduate degree. 3+2+3 is something that needs to be discussed a lot in order to create a common meaning of the expression. (Rydberg)

Problems and measures

The vocational training is often not considered in the new system 3+2+3. There are few professions in Sweden that are regulated, while there are a lot more of them in the South of Europe. If the vocational degree will be removed in Sweden, it will be hard for Swedish students to apply for a job in a country that has certain regulations about it. However, the more regulations, the more difficulties the students training will confront.
Empirical Findings

(Rydberg) Nevertheless, it is a possibility that the vocational training will not be affected by this new system at all. (Millnert)

“It is important to keep in mind that all educations do not fit into this model. The educations that contain vocational training should not be included in this model. It would be inappropriate.” Mille Millnert

Another problem with this degree system, is that it creates organizational and administrational difficulties concerning getting the undergraduate degree and applying for the graduate program. There is a short period of time (June to July) between the last test, getting the exam and then apply for the master. This could be a problem, and it is crucial to find a good solution for it. (Rydberg)

LiU has not started to change its structure concerning undergraduate and graduate degrees. This can be compared to Chalmers\textsuperscript{31} that already has started to change its degree system in alignment with the Bologna Declaration. The Institute of Technology at LiU has been very reluctant to discuss the new structures suggested, and they are of the opinion that it will not include them. They think it is necessary for the Program of Master of Engineering to be continuous, without breaking it down into two cycles, in order to separate them from the Engineers. It is not unusual, like in this case, that people get stuck with the idea that the new system has to be 3+2+3. Sweden can make an interpretation that opens other possible ways. It is important to understand the meaning of the system and be open-minded. (Lundquist)

\textsuperscript{31} Chalmers is a technical college in Gothenburg.
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4.2.4. ECTS credits

"We are doing this for the students and their future on the labour market, giving them the possibility to work in Europe. I think that we should help them as much as we can. Our Swedish students should have the same chance as all the others in Europe to get a job and we will help them with that by giving them ECTS grades, ECTS-credits and Diploma Supplement."

Janerik Lundquist

There has not been much work done in Sweden to implement the ECTS system. The universities are waiting for the report from the Swedish government that will come in February 2004. Most of the Swedish universities have kept a low profile in this matter, with the exception of the Business College in Jönköping. This Business College has decided that all the students that entered its International Business Program the autumn of 2003, would only receive ECTS grades and 60 credits per annum. Jönköping is somewhat special, since it is a foundation. This makes it easier for it to change on its own, instead of waiting for the report from the Swedish government. The other Swedish universities that are waiting for the report can be at a disadvantage. This disadvantage constitutes of that they have less time to reach the same quality level as the other European universities already have accomplished. It has been made clear that the implications of the Bologna declaration will be carried out. Swedish universities therefore need to act in order to keep up with other European universities, instead doing nothing while waiting for the report. They ought to derive advantage from the other European universities in the lead. (Lundquist)

Problems and measures

The credit system and its valuation have upset many countries in the south of Europe. They do not like that it is based on the student’s working hours since the credits there are based on the number of hours of given lectures. At present the credit system in Sweden is based on the student’s working hours in accordance with the Bologna declaration. However, it is not sure that these credits are well proportioned since some courses with the same credits demand more work than others.
Empirical Findings

(Lundquist) During our time at LiU, we have noticed that this is true and that the credits of the courses sometimes seem to be uneven distributed. Courses with the same credits demand different amounts of working hours. Some courses demand a lot more, or less, working hours than the credits related to it. The Bologna Process offers LiU a good opportunity to look over these issues. LiU should be as honest to other foreign universities as it wants them to be, concerning the courses and credits given. (Lundquist)

4.2.5. ECTS grades

"We have many different grading systems in Europe. These systems are not possible to maintain if we are going to have a mobile labour market. No one can interpret the grades. What does 27 from Italy mean and how much is a G from Sweden worth?"

Janerik Lundquist

The fact that the ECTS grading scale consists of seven levels, upsets many of the employees and students at the Swedish universities. Furthermore, the Swedish newspaper, Svenska Dagbladet, recently published an article about the ECTS grading scale, which was rather critical about the ECTS grades. The article claimed that it was a possibility that the teaching would become more concentrated on details, as a result of this new system. Moreover, it stressed that the system could be unfavourable to the students’ in-depth learning, and put them under more pressure. (www.svd.se) However, people have different opinions about this scale and they interpret it in various ways. (Rydberg, Lundquist) Some people connect it with the old grading scale from one to five, when the teachers were restricted to only give away a few top grades, to maintain the “equilibrium”. However, this is not in alignment with the Swedish interpretation of the ECTS grading scale. (Lundquist) The vice chancellor at LiU is of the opinion that the concern regarding the grading scale should not include the number of levels. He argues that the meaning of each level should be the same throughout Europe, and it therefore needs to be discussed. (Millnert)
LiU has participated in ECTS projects since 1992 and it has implemented ECTS fully for both incoming and outgoing students since 1997. (www.liu.se, 6) The system has proved to work very well at LiU. The exchange students get both ECTS grades and Swedish grades when they are returning home. However, LiU can be seen to be in the middle, in comparison with the other universities in Sweden, when it comes to the implementation of the ECTS. (Lundquist)

Problems and measures
The universities with artistic education such as art and dance are the most upset and critical ones to the ECTS grading scale. At present they do not use grades at all because the grades are considered to be non applicable in these types of educations. (Lundquist, Rydberg) To sort this problem out, it could be a good idea to study how universities in other countries are handling it and use it as a basis for discussion (Lundquist).

LiU does not have any artistic educations, so this is not a problem. Despite this, the grading scale is met with resistance at LiU, mostly in the shape of mental blocks. The teachers who base their lessons on a system called PBL\(^{32}\) have difficulties to mark students individually, since the education is based on work in groups. However, if the universities do not change to the ECTS scale, it could imply problems for students who want to work abroad in the future. If they have received a G, they will probably have a much harder time getting a job on the continent, or even having someone to look at their applications. This is due to the fact that foreign employers do not know what a Swedish G means. It is not worth anything. The questions to the teachers who want to keep the present gradin system as it is, should be as follows: (Lundquist)

“Is this the way you want to see your students, always in the bottom of the pile of job applications, then you should keep this system that you find so important.”

Janerik Lundquist

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\(^{32}\) Problem based learning
Empirical Findings

There are only a few people who work with the ECTS-system at LiU and who know a lot about it. Then it is a large group that are insecure of its signification. This is a problem and measures have to be taken, to change this situation for example through meetings and discussions. (Lundquist)

4.2.6. ECTS label

There are only two universities in Sweden which have applied for the ECTS label. These are the universities Uppsala and Linköping. LiU has worked hard to fulfil the criteria. They started to process in the beginning of March 2003 and they sent in the application form in November this year. Translators were employed during the summer to translate the descriptions of the courses into English. However, the chance that one of these universities gets the ECTS label is small. The criteria are hard to fulfil, but different interpretations can open new paths. LiU has fulfilled the criterion that requires that all program descriptions at the university must be written in two languages. However, it still has some courses, which are written only in Swedish. The announcement of universities that will get the ECTS label will be made in the beginning of February 2004. If LiU receives this label, the university can be seen as model for other universities. If LiU will not get it, it has at least improved its quality of the educations. (Lundquist)

We have now been presenting the implications of the Bologna Process at LiU. We will therefore move on to describing what makes LiU unique and competitive, in the tougher competitive environment that the Bologna Process has created.

4.3. LiU’s uniqueness

In this last section we will describe different aspects of why LiU should be considered unique. Hence, we will start with describing the historical path that LiU has chosen, and continue with the exchange students’ point of views of LiU and why they choose to study there. After that, LiU’s connection to the Swedish society will be dealt with. Finally, the
international marketing of Swedish universities will be described and in particular the marketing of LiU.

The information presented in this section, is to a great extent gathered with the SWOT-analysis in mind, in order to focus on the strengths and weaknesses of LiU. We will once more point out that much of the information origins from LiU´s homepage, which is made in the purpose of marketing the university. However, to complement this information, we have chosen to mix it with the answers received from the exchange students. The purpose of this is to show to what extent the information from the exchange student corresponded with the information found on LiU´s homepage.

4.3.1. The history of LiU

LiU has become one of Sweden’s largest and most modern universities in only three decades. Furthermore, the university has chosen another path than its Swedish predecessors, by thinking different and not copying them. LiU´s way of thinking has contributed to success, which probably will result in that new Swedish universities will follow in its footsteps and try to copy its strategy. (Andersson in ECTS practical guide 2002-2004)

“...our university can be seen as the oldest among the newcomers as well as the youngest among the most established ones.”

Bertil Andersson (in ECTS practical guide 2002-2004, p3)

Since the foundation of LiU in the 1960´s it has established itself as an innovative and modern institution both concerning its education and its research. Interdisciplinary is seen as a keyword in LiU´s research and it is especially observable within the Faculty of Arts and Sciences, where research such as Child Studies, Health and Society, Technology and Social Change, Communication Studies, and Water and Environmental Studies are addressed. (http://www.liu.se, 2) The research area is also notable in the Department of Physics and Measurement Technology and it is known
Empirical Findings

internationally for its research in the material science and biosensor technology. (Andersson, in ECTS practical guide 2002-2004)

LiU is also unique in the way that it offers interdisciplinary educational programmes such as Cognitive Science and Information Technology. These programmes are combining humanities and social studies with computer science and are aiming at a holistic view of information technology. (www.liu.se, 9)

“LiU offers quite an extensive amount of courses in English, which are at the same time both technical subjects and more humanistic subjects. Chalmers and KTH offer mostly technical subjects and only in very specific areas.”

Exchange student

LiU uses PBL, and the Faculty of Health Sciences was first in Sweden to introduce it on a larger scale. (Andersson, in ECTS practical guide 2002-2004) This method has become more and more established within all educational areas at LiU. However, it is more prominent in for example teacher training, psychology, and engineering. The purpose of PBL is to encourage students to become more actively involved in the problem-solving process. Furthermore, it is a procedure that prevents the traditional method of learning by rote. (www.liu.se, 2)

The National Agency for Higher Education has carried out a poll, concerning jobs that the students got after their graduation. This poll was given to various students, and it showed very good results. One result was that LiU has got one of the best undergraduate studies in Sweden. (Rydberg)

“The secret behind this result is that LiU concentrated on a large number of educations and a broad spectrum of courses, at an early stage, that everyone tried to copy. We have an advantage here.”

Lars Rydberg

Furthermore, LiU has got another advantage, since it was the first university in Sweden that were organized in large institutions. Nowadays a lot of universities are organized like that. The positive with this
organisation mode is that it gives people with different background the possibility to meet e.g. on the coffee breaks to change ideas and discuss different matters. (Rydberg)

4.3.2. LiU through the eyes of the exchange students

Nordic countries are considered safe, which is positive for Swedish universities in the sense that foreign students want to study there. (Exchange students, Kihlborg. Sandewall) When it comes to the reason for choosing LiU, many foreign students choose it since Linköping is a quite small city and close to Stockholm. The infrastructure is good and it is a modern city situated in a cultural and historical area. LiU´s possibilities to receive foreign students and researches are very good. One reason for this could be the size of the city. In Stockholm everything is spread out and Uppsala has problems with guaranteeing the exchange students a place to stay. (Sandewall)

“Linköping is a smaller city, which was a definite prerequisite for the university where I wanted to study. I heard from friends who went to Chalmers and KTH that they hardly had any contact with the Swedes. Hence, LiU offered an important advantage.”

Exchange student

The competition among Swedish and the European universities can be seen as very unfair, since the education in Sweden is free of charge. (Axberg-Ahlsson) LiU offers a quite extensive amount of courses and master programs in English, which makes it even more popular and accessible for foreign students. LiU is among the top three universities in Sweden that offers the highest number of master programmes in English. (Sandewall) However, there are notable differences concerning the organization of the courses between European universities.
Empirical Findings

“Courses (at LiU) are very much based on a combination of articles from business journals and course books, which is a nice mix. I have never been in the library at my home university and have never had to read an article. This has been an important lack, which I discovered here at LiU.”

Exchange student

“I like that you do a lot of group work and that you have the physical space that facilitates that. There is a constant cooperation between students. We also have cooperation, but we do not facilitate it as well as you do.”

Fiona Goss

We have also discovered some negative aspects of the courses through the interviews with the exchange students.

“The system is too much focused on producing quantitative output, concerning written papers and focuses too much on presenting. I would prefer less emphasis on presentations for students. Do this in earlier years and focus on being more demanding for written reports to improve quality.”

Exchange student

“There is no sufficient feedback in classes on written material and presentations.”

Exchange student

Despite these negative aspects, a lot of the exchange students think that everything at LiU works fine. They are pleased with the reception, the technical equipment at the university, and the living standard. Several of them have got friends who have been students at LiU before and liked it there. (Kihlborg, Sandewall) Furthermore, some of LiU’s partner universities think that the administration is excellent. The exchange students are also pleased. They think it is fantastic to study at the university, since everything works there. (Axberg-Ahlsson)

"Oh, they (LiU) are fantastic at administration, they even made it into an art.”

Ingrid Axberg-Ahlsson (referring to comments from an exchange student)
4.3.3. Connection to the Swedish society

Mjärdevi Science Park in Linköping is one of the most concrete examples of the role of LiU as a driving force for the development of the industry. The Science Park constitutes of 4500 employees and of 170 companies, mainly within the IT-area and telecom. 50 per cent of the companies have their origin in the research departments at the university.

CIE\(^{33}\) is a part of the Department of Management and Economics\(^ {34}\) at LiU, educates individuals every year who are going to start out in business on their own. This co-operation is a part of the company establishment within Mjärdevi Science Park in Linköping and ProNova Science Park in Norrköping. During the year of 2002, 20 new companies were established within the area of Linköping and Norrköping by people somehow connected to the university. (\url{www.liu.se}, 4)

Several companies, organizations, and authorities turn to the university for competence development through education. One of the greatest, closest and most frequent partners is the County Council in Östergötland, which invest a lot to support the research. Big R&D-intensive companies have always handed out important research assignment to LiU and its competent researchers. (\url{www.liu.se}, 4)

4.3.4. Marketing of LiU

The Swedish government has decided that the education in Sweden should be free of charge. Therefore the financial motive for the Swedish universities to invest in marketing decreases. However, some kind of marketing can be noticed. Various universities are for example participating in exhibitions, both on a national and an international level. A reason for doing this could be the desire to fill up the Swedish educational programs, in order to avoid loosing too much subsidy money from the Government. (Sandewall)

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\(^{33}\) Centre for innovation and entrepreneurship
\(^{34}\) Ekonomiska Institutionen in Swedish
Empirical Findings

A catalogue called “Study in Sweden” is another way of market the Swedish universities internationally. All the master programs in Sweden are presented in this catalogue, and it is sent out to various embassies and universities. The information that the catalogue contains is also available to read on the Internet. Furthermore, an ECTS information package where all the courses are presented, are sent to all partner universities. (Kihlborg)

The people who are working with the co-ordination of the exchange programmes, have the responsibility to inform the students and to market the foreign universities. Some universities arrange international weeks. This signifies that they are inviting foreign universities in order for the students to meet them and to ask questions. (Axberg-Ahlsson) The marketing that LiU does to influence its students to study abroad, is to arrange a theme day concerning studies abroad every year. The purpose is to inspire and encourage the students to think global when it comes to studies, language studies, and trainee jobs. (www.liu.se, 4) Furthermore, the first year students are informed about the importance of having an international perspective on their education to be able to compete on the labour market. (Kihlborg) An Ambassador Day also takes place annually to prepare the Swedish students at the university who will go abroad the next year. During that day, the students get lectures about cultural clashes and their role as an ambassador for LiU. (Axberg-Ahlsson) Our personal experience tells us that students tend to listen to other students concerning the advantages of exchange and in the recommendation of suitable universities.

The marketing that LiU carries out towards the foreign students is concentrated on its homepage. A lot of effort is put into making the homepage satisfactory and up-to-date, since it is not possible with the course catalogues, as the information changes all the time. (Axberg-Ahlsson) However, an exchange student’s opinion about LiU’s homepage is as follows:

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35 In Swedish Temadag Studier.
36 In Swedish Ambassadörsdag
Empirical Findings

“The homepage of the university looks very boring! The material which is offered at my home university about LiU does not look flashy, interesting, and could be a lot better.”

Exchange student

Despite this negative aspect of LiU´s marketing effort, the university has a good reputation, which attracts Swedish and foreign students. (Rydberg) These following statements are a further proof of that LiU has got a good reputation internationally, and that the exchange students like it there.

“The University of Linköping has a good reputation. Although it is not as well known as Chalmers or KTH, it offers you the possibility to get a good degree from a university with a good reputation.”

Exchange student

“The reviews from other students in the database at my home university about Linköping were very positive, which is definitely the first reason, which makes people interested in looking at a specific university at all.”

Exchange student

Now we have presented the empirical data gathered, we hope that the reader has developed an understanding for what the Bologna Declaration implies and its effect on LiU. Furthermore, we hope that the reader now is aware of the importance of the declaration, and henceforth do not contribute to the common misunderstandings about it that exists today. However, this chapter also served as a base for understanding the next chapter that is to come, the Frame of Reference.
5. Frame of Reference

In this chapter, the Frame of Reference, we will present the theoretical base for performing our analysis according to the purpose of this thesis. The majority of the theories chosen are based on companies in the industrial sector as well as the service sector, and not on knowledge based organizations. However, we believe that many of the theories in this chapter are equally suitable for knowledge based organizations such as universities. Nevertheless, the theories will provide a base for understanding the area of research. We want the reader to be aware of these facts before reading the Frame of Reference. These are also the reasons for why we have chosen to present the theoretical framework after the empirical findings. We believe that after reading the chapters about the Bologna Process and the Empirical Findings, the understanding of the theories chosen will increase.

![Figure 3](image)

Figure 3 A three step model for explaining the structure of the thesis, step 2 (Own construction, 2003)

In the previous chapter we presented the contents of the first box. Now we will continue by explaining the box in the middle. The internationalisation strategy we have chosen to focus on is the network approach. LiU, and Swedish universities in general, are already involved in numerous international networks and co-operations. However, we found it interesting to take a closer look at these networks and the co-operations, with the Bologna Process in mind. We are of the opinion that the Bologna Process will increase the European student market and hence the competition between universities. It will therefore be important for the universities to be a part of in the right networks and co-operation

-63-
agreements. With this in mind, we found it important to include theories concerning competitive advantage in the Frame of Reference. Those theories will further facilitate the understanding of, and illuminate the strengths and weaknesses of LiU, and the threats and opportunities that the Bologna Process implies. Finally, we believe that the Frame of Reference can serve as a base for universities that want analyse their current situation, and decide what strategies to use in order to cope with the changes that the Bologna Process implies.

5.1. Networks and Internationalisation

We will here present the concept of networks, motives for entering and what it implies to be a part of them. Furthermore, we will discuss why and how networking can be used in the process of internationalisation.

5.1.1. Definitions of networks

The simple relation between two parties is called a dyad. The first step from a dyad towards forming a network is adding a third party. The result is a triad, which is the smallest possible network. There are two basic models of triads that can be easily illustrated as followed (Axelsson, 1996):
Model A is an example of three actors operating separately in different stages of the production system. It could be e.g. the relation and co-operation between a supplier (X), a customer (Y) and the customers’ customer (Z). Model B could exemplify the state of dependence between two suppliers and one customer, or the opposite. These two models can be seen as a cross section of a network. The network further contains both direct and indirect connections. This demonstrates the complexity of networks and how a company’s action in a certain relation also effects other relations and vice versa. (Axelsson, 1996)

There are numerous definitions of what a strategic network is. However, a common feature is the simultaneous presence of competition and co-operation. Networks can furthermore be either vertical or horizontal, or a combination of both. (Jaklic, 1998) The definition provided by Jarillo (1993, in Jaklic, 1998) is that a network is an innovative organization with the advantage of two co-operative arrangements between companies: subcontracting and vertical integration. Strategic networks are long-term, purposeful arrangements among distinct but related

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37In English: Example of two kinds of triads.
Frame of Reference

organizations, which allow the firms within the networks to gain or sustain competitive advantage towards their competitors outside the network. The term strategic network illustrates that the network is not only a co-operational phenomenon, but also used to position the company in the fiercer competition. (Jarillo, 1988). D'Cruz & Rugman (1994, in Jaklic, 1998) on the other hand define network as a model consisting of five partners: the multinational core enterprise, key suppliers, selected competitors and the non-business infrastructure such as the service sector and various levels of government. Jarillo’s (1998) and D'Cruz & Rugman’s (1994, in Jaklic, 1998) definitions are both describing vertical networks. The most common perception of horizontal networks is that competitors co-operate without anyone being dominating, all parties are equals (Jaklic, 1998). Thorelli (1986, in Jarillo 1988) stresses that a network is something between markets and hierarchies. He argues that a company can not be truly understood without reference to its different relationships, because of the complexity of today’s business environment.

Van der Ven & Ferry (1980, in Axelsson, 1996) distinguish two important characters of a network. They define the first one as the total pattern of relations within a group of organizations that are acting in order to achieve common goals. This definition emphasizes, besides the common goals, on the complementary resources. It also assumes that all the actors are known. This could be seen as an alliance, and it is often referred to as strategic networks. The second definition implies that networks are groups of two or more connected relations. Here the emphasis is on the activities and the exchange relations. There are no boundaries for what is part of the network, as long as the parts are connected. This implies that the network is constantly expanding. The actors are both known and unknown to each other. There are no common goals, instead everyone acts upon their own goals and interests.

Taken together, our opinion of what defines a network is a co-operational relationship where there also exists competition. Furthermore, the relations are both direct and indirect. We believe that despite of the contradiction between these factors networking can be, if managed correctly, favourable for the business. In order to manage the network in
the most appropriate way, the structure must be known. The structure issues of a network will hence be presented next.

### 5.1.2. Network structures

The structure of a network can be, as been indicated above, tight or loose. In a tight structure the roles of the actors are clear, the activities are tightly linked and the resource connections are strong. The loose structure implies the opposite situation. (Axelsson, 1996) The interaction process in a business relationship shows some common features such as adaptations that implies a co-ordination of activities, social interaction or personal bonds, and routines. The routines tend to become institutionalised over time and they facilitate the process of working with complex needs in a relationship. However, differences exist between the relationships within a network. Some of the relationships are long lasting while other only last for a short period. During the pace of time, the relationships between companies also change in content and in strength. In business networks stability and change are coexisting, although they may seem contradictory. They are in fact interdependent and important for the network dynamics. (Håkansson & Snehota, 1995)

Another characteristic of the structure of a network is the density, that is, the number of relations in proportion to the number of potential relations. Furthermore, hierarchy and power are vital features. (Axelsson, 1996) Håkansson & Snehota (1995) are of the opinion that one clear characteristic of a network can be distinguished, which is the lack of a centre as well as clear boundaries. They stress that a peculiar attribute is the chain effect that results from the connectedness. This implies that what happens in one relationship affects another and the chain effect will propagate through the network. This development is neither automatic nor deterministic; it is instead transmitted by the actors. The authors also claim that when studying it as an organization, the network structure is clearly different from a hierarchy, where the links are invariable.

Egan (2001) is of the opinion that networking is more suited for small firms that want to compete with larger ones, because of the smaller
firms’ more personal nature. Most companies encourage their employees in developing networks with associates, competitors, and others that can be of great value in terms of knowledge. Networks can, despite of the informal character, be strong and enduring. The personal and social relationships is according to Egan (2001) functioning as the glue that keeps the networks together.

5.1.3. Motives for networking

One motive to why organizations engage themselves in an inter-organizational networking relationship is because of the possibility to increase the revenue (Contractor & Lorange, 1988, Harrigan, 1985, Zajac & Olsen, 1993 in Ebers, 1997). If the company collaborates with its competitors, and if they work together against another competitor the partnership will be beneficial. Through the access to and co-ordination of resources and capabilities, the company hopes to increase their competitiveness. Stronger competitiveness can be achieved through improved products, better market access and faster market entry. These factors will consequently lead to increased revenue. Another motive for networking is cost-reduction, which can be achieved by economies of scale that arise due to e.g. joint R&D. Networking offers a cost efficient way of obtaining vital know-how that hardly can be obtained in another way. (Contractor & Lorange, 1988, Håkansson & Snehota, 1995 in Ebers, 1997) Moreover, inter-organizational networking is perceived as a fast, effective and efficient way of learning. (Dodgson, 1993, Hamel 1991 in Ebers, 1997)

The importance of networking is constantly growing, mainly because companies become more aware of the importance of balance between competition and co-operation. The reasons for co-operation are the increasing complexity of products, services, production, delivery and the technological innovation. Another important factor is business globalisation in the sense that the increase internationalisation demands significant knowledge, high-quality products and services, and of course capital. Co-operation can and do occur with or without a formal contract.
5.1.4. Internationalisation

To better understand the process of internationalisation in a service company it is crucial to emphasize the creativity and innovativeness in the actions undertaken by the company. In this combination of creative activities, there are four distinguishable categories; R&D, financial, organizational and marketing activities. Even though each of them plays an important role, the activities of the most significance are the R&D-activities. These activities are aiming at further develop the present knowledge, but also at developing new knowledge and concepts of service. Furthermore, the development of these activities will influence and have a long-term effect on knowledge capital, and hence be of decisive significance for success, especially in knowledge intensive companies. However, development and growth demands financial support, which make the financial activities important. The organizational activities are needed in order to co-ordinate the relations and interactions as well internally as externally. It is common that the initial investments in development are managed in forms of projects, to be able to focus and prioritise the innovative efforts. The marketing activities are needed in order to develop the co-operation with the customers, and to create competitiveness for the new possibilities created by the investment. To succeed the company must manage to create a positive image, favourable expectations, healthy customer relationships and attractive offerings in terms of price and quality. (Edvardsson et al. 1992) We believe that the four categories discussed by Edvardsson et al. (1992) are important in the process of internationalisation when the network approach is used. In the internationalising process the company must analyze its own needs and desires within the categories. By doing that, it will learn what to search for in its network partners.

Jaklic (1998) argues that it is necessary for companies, especially those that origin from small economies, to be engaged in internationalisation. It is a process that demands a considerable amount of time, capital and knowledge, but there is also a lot to gain. By using the network approach when internationalising the companies have the opportunity to accelerate both the internationalisation and the development of the company.
One way of studying internationalisation is through the 3-phase internationalisation model described by Luostarinen & Hellaman (1994, in Jaklic, 1998). The 3P model consists of three phases of internationalisation that are dependent, independent and interdependent. Although the model is originally directed to product or service companies, we believe that it is helpful to analyse the internationalisation process of LiU. A fact that strengthens our belief is that networks are present in each of the three phases.

**Figure 5** The Three-Phase Internationalization Model (Jaklic, 1998, p.367)
The three phases of the 3P model and their contents will here be presented, starting with the first phase, the dependent internationalisation.

**Dependent internationalisation**

The first phase can be reached through three ways of internationalisation. The first manner, A) implies importation of products and services. This is a rather basic way of internationalising, but a very good starting point. B) suggests various forms of subordinate contracting, e.g. being a licensee, subcontractor or contract manufacturer, or a joint venture ownership. These forms demonstrate different forms of networks since they imply co-operation. Moreover, they offer several possibilities of learning, but also independence. It is important for a company to develop a learning strategy to be competitive in the future. Finally, C) implies exportation through an export management company or an export trading company. The dependence upon foreign entities and domestic middlemen regarding the internationalisation and knowledge transfer are significant to all three modes of the first step.

**Independent internationalisation**

The next step is the independent internationalisation. The company increases its commitment to international markets independently or through vertical networks, by using modes of internationalisation other than export. The four stages within this stage imply procedures such as selling through agents and distributors, engage subsidiaries, systems and indirect investment in production operation, which all are contractual relations. (Jaklic, 1998) In this second phase, questions about international development also emerge. Bartlett & Ghoshal (1992, in Jaklic, 1998) mention four mentalities that deal with these questions, international, multinational, global and transnational. However only the three first mentioned belong to the independent phase:

- The mentality of the international enterprise implies that headquarters open subsidiaries abroad with the aim to support international trading in a specific market.
- In a multinational enterprise, headquarters establish companies abroad that are relatively independent in terms of production.
Furthermore, the subsidiaries are characterized by a hierarchical organization which is reporting to one centre.

- The global enterprise is managed from one centre, striving for producing for the global market. Moreover, the enterprise’s production is executed in a few efficient factories.

**Interdependent internationalisation**

The third step in the 3P model is the interdependent internationalisation. The members of the network are now truly partners, each with a substantial strength and freedom concerning the market power and the R&D function. The transnational mentality implies that the company should adapt to local needs and at the same time maintain the global efficiency. The transnational company is neither fully centralized nor uncontrollably decentralized. Furthermore, it has multiple headquarters and it favours international network internationalisation. It is fundamental for larger companies to shift in their mentality from the global or multinational to the transnational, in order to reach the third phase. This implies that the centres of decision making and R&D will be spread around the world, taking in consideration the quality of resources in the different countries or environments. (Jaklic, 1998)

Even though many of the ideas of the 3P model are better suited for a product or service company, we see several possibilities for universities to make use of it as well. We have now presented how the network approach can be used as a tool for internationalisation and will continue with how these networks and the relations within them should be handled.

**5.2. How to handle relationships and their changes**

In this part of the Frame of Reference we will start with describe the role of communication in networks and relationships. We will continue with the importance of trust and conclude by describing how different types of inertia can emerge.
5.2.1. Communication

The desire to share information differs among societies, within groups, and at local offices and headquarters. (Choi & Kelemen, 1995) von Krogh & Roos (1996) argue for the importance of communication and they are of the opinion that this subject needs increasing attention. The authors further stress that a dialogue can lead to a broader understanding and awareness of different issues and actions. Bringing researchers from different fields together and having a discussion about their research can lead to the development of new ideas. It can also make the understanding of their action patterns more clear. If the conversations are very good, strategic decisions can be made faster and more effective and hence turn a strategic challenge into a strategic opportunity. (von Krogh & Roos, 1996, Leenders et al., 2003) The chance that the communication will increase and be fruitful is more likely to happen among people with similar backgrounds or expertise. However, communication also has a negative side. If the interaction is too high, and the people in the team are too enthusiastic about a certain idea, it is possible to miss the real value of it. Brainstorming can be seen as an inefficient way of communicate, since only one person can speak at the time and the other people can not use the waiting time efficiently. A solution to this problem can be communicating through the Internet. The Internet is a tool that allows some interactions, e.g. shared electronic spaces, and restricts others. (Leenders et al., 2003)

The communication intensity is furthermore depending on the distance between the partners and the structure of the network. If the communication network is highly centralized, the commitment of non-central members will be reduced. In a decentralized communication system it will consequently be the other way around. The latter case encourages each member to be more creative and engaged in the process of finding solutions to problems. The result is thus more team-based and each member contributes to it. However, there is also a tendency toward decreasing communication between the members, if the distance between them is long. (Leenders et al., 2003)
Another angle of communication is the language used. Various authors stress the importance of speaking the partners’ language in a co-operation relationship. A common language is a fundamental integration mechanism which is based on verbal communication between people, rules and directives. (Grant, in Choo & Bontis, 2002) Furthermore concepts and principles can be hard to transfer from one company to another and more so from one culture to another, since the meaning of the concepts used may differ. (von Krogh & Roos, 1996, Grant, in Choo & Bontis, 2002) If two parties speak different languages it will result in a stifled communication. (von Krogh & Roos, 1996) Contractor, & Lorange (1988) and Killing (in Contractor & Lorange, 1988) are of the opinion that the co-operation partners have been chosen based on the language skills rather than choosing the partner best suited. von Krogh & Roos (1996) suggest that time and resources should be spent on developing a mutual meaning to concepts and phrases in order to make the company richer in terms of knowledge.

We believe that communication is essential for networking. Furthermore, it is important to understand and interpret different issues in the same way. Communication is a key-factor to success, but it is not the only one. Trust is also crucial. This factor will now be addressed.

5.2.2. Trust

There are many definitions available for the concept of trust. (Humphrey, in Lane & Bachmann, 2000) Choi & Kelemen (1995) together with Baderschneider (2002) describe trust as a key factor that makes the exchange and transactions within and across organizations more easy and successful. Sydow (1996, in Lane & Bachmann, 2000) and Buckley & Casson (1985) stress that trust is a social phenomenon, which facilitates collaboration and the work within organizations. These authors continue their discussion emphasizing that trust normally is much stronger between members of the same extended family and members of the same religious or ethnic group. It is possible though, for people with different values to trust each other, but it must be based on some common values or aims. (Brenkert, 1994 in Lane & Bachmann, 2000) The process of trust
building between companies located in different environments is hence a slow process of mutual learning. (Humphrey, in Lane & Bachmann, 2000) Nevertheless, it is essential for the development of trust to consider the relationship on a long-term basis. (Jarillo 1998, in de Wit & Meyer, 2002) The collaboration between the partners will be more open-ended the more trust that exists between them. In other words, the more trust, the better the relationship can develop. (Kanter, 1994, in de Wit & Meyer, 2002) If the collaboration develops into being successful over time, the possibilities for mutual emotional ties grows, including the caring for each others interests. (Child, 1994 in Lane & Bachmann, 2000) The confidence about the future expectations and behaviour of the partner will grow as a consequence of the increasing trust. In a situation where the parties do not trust each other, the co-operation will be threatened and the learning and knowledge transfer limited. (von Krogh & Roos, 1996)

Trust is particularly important for the stability and efficiency of the network (Jarillo 1998 in de Wit & Meyer, 2002, Sydow, 1996, in Lane & Bachmann, 2000). A certain amount of trust is necessary within any network to maintain the relationship and make it profitable (Van Well, in Gemünden et al, 1997). Trust is furthermore associated with vulnerability and risk-taking (Humphery, in Lane & Bachmann, 2000). Hardy, Philips & Lawrence (in Lane & Bachmann, 2000) stress that trust exists between partners when the predictability is high and the partners within the relationship will not engage in opportunistic behaviour. The importance of trust is higher, the greater the uncertainties and ambiguities within the relationship are (Maravelias, 2001). Killing (, in Contractor & Lorange, 1988), is of the opinion that the level of trust will be high if the partners have worked together before and already established a degree of trust. Furthermore, there will be less unnecessary interaction between the partners if the level of trust is high. However, trust is not likely to evolve spontaneously and it is not a natural condition. (Van Well, in Gemünden et al, 1997, Bachmann, 1997 in Lane & Bachmann, 2000)
Hardy et al. (in Lane & Bachmann, 2000) have distinguished two different ways of cooperation between organisations, they can either be based on trust or on power. The division is further depending on how shared meaning is created and the purpose of the cooperation. Furthermore, the authors divide the trust-based cooperation into spontaneous and generated, and the power-based cooperation into manipulation and capitulation. In all the four cases shared meaning is the cornerstone. Figure 6 displays the division between trust and power and the specific implications of each of the four cases. In the case of the trust-based relationships the shared meaning either exists or needs to be constructed. When it comes to the power-based relationship it can be either distorted or imposed by dominant partners. The authors have developed a model by linking trust to communication and meaning. This facilitates the identification of the means to build trust in situations where new partnerships are created.
<table>
<thead>
<tr>
<th>Nature of co-operation</th>
<th>Spontaneous</th>
<th>Generated trust</th>
<th>Manipulation</th>
<th>Capitulation</th>
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<tbody>
<tr>
<td>Co-operation is trust based</td>
<td>Co-operation is trust based</td>
<td>Co-operation is power-based</td>
<td>Co-operation is power-based</td>
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<tr>
<th>Dynamics of co-operation</th>
<th>Co-operation emerges naturally, through gamble</th>
<th>Co-operation is achieved through management of meaning</th>
<th>Co-operation is achieved through management of meaning</th>
<th>Co-operation is achieved through dependency and socialization</th>
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<tr>
<th>Synergy, innovation, and risk</th>
<th>Trust emerges spontaneously: synergy is high; risk is high</th>
<th>Trust is created through equal participation which increases synergy but also increases risk</th>
<th>Dominant partner uses symbolic power to reduce risk and to increase predictability; synergy is reduced</th>
<th>Subordinate acts as a tool of dominant partner: risk to dominant partner is low; synergy is low</th>
</tr>
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<tr>
<th>Power</th>
<th>A ‘win-win’ view of power is implicit although power is largely ignored</th>
<th>A ‘win-win’ view of power prevails as asymmetrical power is decreased</th>
<th>A zero-sum view of power prevails as asymmetrical power is either maintained or increased</th>
<th>A zero-sum view of power prevails as asymmetrical power is either maintained or increased</th>
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<tr>
<th>Meaning</th>
<th>Shared meaning already exists between partners</th>
<th>Shared meaning is mutually constructed by all partners</th>
<th>Meaning is shared but has been distorted by one partner</th>
<th>Meaning is shared but imposed by one partner on another</th>
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<tr>
<th>Implications for research/Practice</th>
<th>Shared meaning may not be as ‘spontaneous’ as it may appear</th>
<th>Process creating shared meaning is difficult and may involve conflict</th>
<th>Relationship may look like trust when it is based on power</th>
<th>Power imbalance may mean that partners are not as ‘independent’ as they may appear</th>
</tr>
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**Figure 6** Forms and façades of trust (Hardy et al. in Lane & Bachmann, 2000, p. 79)
Spontaneous trust
Spontaneous trust refers to when trust emerges without any deliberate intent. It arises through communication when shared meaning already exists between the partners. One example of this can be shared meaning of symbols e.g. the use of symbols by police officers to signal that their position is trustworthy, or through a communal identity. Nevertheless, the authors indicate that they are not completely sure that trust can arise spontaneously.

Generated trust
Hardy et al. (in Lane & Bachmann, 2000) describe generated trust as a co-operational intent to create shared meaning, which should be mutually constructed by the parties involved. The trust will be generated by free communicative activity that will ensure that shared meaning is co-produced. This procedure can result in synergy, innovative outcomes and predictability, which will benefit all members involved in the relationship. However, the authors stress that trust should not preclude conflict. Conflicts contribute to the creation of shared meanings and reciprocal relationships in which synergistic outcomes are possible.

Manipulation
Manipulation is an attempt to increase power, which one part in the relationship will gain and the other one loose. This strategy can be manifested in symbolic power, bringing meaning to a co-operation in order to influence behaviour and increase predictability. There is a great possibility that the stronger partner in the relationship becomes tempted to use the power rather than the mutual trust to ensure the co-operation. The predictability of the weaker part is thus more certain than the possible outcome of synergy through trust.

Capitulation
The co-operation in a capitulation relation is based on the weaker parts’ dependency on the stronger part, rather than on trust. However, it is possible for the stronger part to trust its partner to behave in a certain way, because of the dependency relation. The conditions for the relationship are enforced by the stronger part and the dialogue is reflected in a compulsory way and hence not completely free.
When working in a network it is important to have a shared meaning with the partners. We have now seen how it can be constructed by either trust or power. The willingness to perform changes within the company might be influenced by whether the relationship is based on trust or power. When a company is going to change, it is important that all parties involved actively support it. This discussion leads us in to the issue of inertia.

5.2.3. Inertia

If the company’s contextual surrounding changes and the company therefore decide to change its strategy and structural forms in alignment with the contextual change, difficulties are likely to arise. These difficulties can consist of strong persistence when changing the existing forms and functions, and this is what Rummelt (1995, in De Wit & Meyer, 2002) refers to as inertia. Furthermore, the author argues that if the persistence includes inefficient forms and practices, the company has got a problem. Rummelt (1995, in De Wit & Meyer, 2002) mentions five sources, or frictions, that inertia can emerge from. We will describe these frictions together with some example of how they can cause inertia:

1. The first friction is the *distorted perception* and is characterized by difficulties to look into the future. The problem originates from that the individuals in a company might be aware of the long-term consequences of their current actions or inactions, while the organization as a whole might act short term.

2. *Dulled motivation* is when the resistance to change depends on the lack of motivation. It can be the result of a temporarily increase of disruption in operations, or an increasing investment cost.

3. *Failed creative response* can be a result of the lack of trust between the people working in the company and the senior management, concerning the latter’s vision commitment. If the employees do not
believe that the vision the senior management expresses today will be valued for tomorrow, they will not be eager to follow it.

4. When changes are taking place in an organization, there are usually winners and losers. In this case managers usually do not act rationally, and often seek a solution that favours them. However, if disagreements between managers occur, it will be difficult to combine their beliefs, and this result in a kind of inertia that is called political deadlocks. These beliefs, including the beliefs of the employees, can be based on strong emotional values attached to policies or norms, among other things.

5. The fifth friction, action disconnects, alludes at inertia that can arise when a company faces new situations, from which it has no former process experience or that stray from the habitual. In partnerships involving more than one culture, inertia can take another form. In this case inertia can cause problems because it is difficult to change expectations originating in cultural beliefs. Co-operation should be built on mutual expectations, and if one or more partners do not agree on the future direction of the partnership, inertia will most certainly emerge.

We have been discussing issues concerning how to handle and manage a relationship. Communication, trust and inertia are all important factors to consider when co-operating, and they are furthermore closely linked to one another. We believe that communication can be used both to build trust and to avoid inertia. Hence the managing of these factors is crucial for the success of the company. Another key to success is having a competitive advantage, which we now will discuss.

5.3. Competitive advantage

Competitive advantage consists of a number of different attributes possessed by a company. It is crucial for a company that these attributes differ from the ones of the competitors, in order for the company to be unique and survive. We will therefore present and discuss how a
competitive advantage can be created and sustained. The different possibilities to create a competitive advantage consist of a company’s market position, whether or not it has imperfect imitable resources, and if it has a first-mover advantage.

5.3.1. Position

The company’s market position is an indicator of whether it has a sustainable long-term competitive advantage or not. The underlying element is based on the company’s performance. As figure 7 shows there are two different kinds of competitive advantage, differentiation and low cost. In order to reach an above-average industry performance, the advantages are combined with three generic strategies; cost leadership, differentiation and focus. (Porter, 1985 in de Wit & Meyer, 2002)

We have chosen to describe only the generic strategies concerning differentiation and differentiation focus. Our choice is based on the fact that the Swedish universities are free of charge and are hence not striving for a cost leadership, neither cost focus. We believe these aspects to be irrelevant for our research and we will therefore only discuss the differentiation and the differentiation focus.

**Competitive Advantage**

<table>
<thead>
<tr>
<th>Competitive Scope</th>
<th>Lower Cost</th>
<th>Differentiation</th>
</tr>
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<tbody>
<tr>
<td>Broad Target</td>
<td>Cost Leadership</td>
<td>Differentiation</td>
</tr>
<tr>
<td>Narrow Target</td>
<td>Cost Focus</td>
<td>Differentiation Focus</td>
</tr>
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*Figure 7* Three generic strategies (Porter, 1985, in de Wit & Meyer 2002, p 351)
Differentiation
The differentiation strategy can be manifested in various forms, but with the comprehensive aim for the company to try to distinguish itself and to be unique in comparison with the competitors. (Porter, 1985 in de Wit & Meyer, 2002) This can be done by performing similar activities as the competitors, but in a different way e.g. using different marketing approaches, delivery systems or products. Furthermore, these activities must add value for the customers and satisfy them in order to outperform the rivals. If the company fails to fulfil these criteria, the competitors can perform the same activities and hence there will be no creation of a unique or valuable position. Benchmarking is a good example of this, since the more benchmarking a firm does the more it looks like the rest. (Porter, 1996) Even though Porter does no express it directly, differentiation implies having a broad target group, as illustrated in the model above.

Differentiation focus
Differentiation focus is another kind of strategy concentrating on seeking differentiation in a narrow target segment, compared to the broad target of the differentiation. The targeting can be on buyers with unusual needs or by using a special delivery system. (Porter, 1985 in de Wit & Meyer, 2002) Having a strong exclusive brand name, and offering e.g. expensive watches to a small segment can as well be a strategy adherent to the differentiation focus. The crucial issue may not be that the product is different from the substitutes, but the special values and feelings of e.g. exclusivity that the product implies. (Åman, 2003)

The use of any of the generic strategies can create barriers for imitators to enter the market, but only short-term. Hence, it is important that the company continually improves its position through investments. (Porter, 1985 in de Wit & Meyer, 2002) Another strategy for a company to prevent imitators will be presented next.
5.3.2. Imperfectly imitable resources

Barney (1991, in de Wit & Meyer, 2002) argues that the base for having a competitive advantage is possessing valuable and rare resources, which can not be obtained by other companies. In the concept of resources the author includes all the attributes, assets, capabilities, knowledge, organizational processes and information controlled by the company. The common factor for these resources is that they can result in improved effectiveness and efficiency. However, there is a combination of three reasons to why these resources can be perfectly imitable and hence create a competitive advantage. The three reasons that will be further explained below are unique historical conditions, causally ambiguity and socially complexity. (Barney, 1991 in de Wit & Meyer, 2002)

Unique historical conditions
A firm’s history can contribute to a competitive advantage and also create an imperfectly imitable advantage over other firms. The advantage can be based on a unique and valuable organizational culture, values and beliefs, or a unique path that the company has chosen in the past. (Barney, 1991 in de Wit & Meyer, 2002)

Causal ambiguity
Casual ambiguity refers to the situation when the link between a firm’s resources and its competitive advantage is not understood or only partly understood by the competitors. This implies that there is a possibility that a company’s competitive advantage can be reflected by a non-described resource that it possess. In other words, if a firm’s competitive advantage can be fully understood, it facilitates duplication and makes the competitive advantage more difficult to sustain. (Barney, 1991 in de Wit & Meyer, 2002)

Social complexity
A firm’s competitive advantage can be founded on a complex social phenomenon such as a company’s reputation or its interpersonal relations. If a firm is able to conceive and implement a certain value-
creating strategy, other firms will also have the same possibility of implementing it. The same argument counts for companies that possess the similar valuable resources, since they all can exploit them in the same way and thereby erase possible competitive advantages. (Barney, 1991 in de Wit & Meyer, 2002)

We believe that the discussion about competitive advantage in the form of imperfect imitable resources relates in many ways to the previous discussion concerning the generic strategies. They are both dealing with the issue of identifying and exploring the uniqueness of the company. Yet another factor that can provide a competitive advantage is being a first-mover, which we are to address next.

5.3.3. First-mover

Being a first-mover implies that a firm should be the first one implementing a strategy and thereby creates a sustained competitive advantage over other firms. (Lieberman & Montgomery, 1998) The first-mover advantage can consist of gaining access to distribution channels, develop a positive reputation or develop goodwill with customer before other companies. (Barney, 1991 in de Wit & Meyer, 2002) Furthermore the advantage includes selecting the most attractive niche and take measures in order to prevent other entrants. However, if some firms enter it will be costly for them to try to attract the customers away from the first-mover company. Although, the late entrants can succeed in taking over the market if they have superior products, or a more frequent and creative marketing that captures the customers' attention. Having a brand position in the customer market is also important, since it makes the firm durable in the minds of the customer. (Lieberman & Montgomery, 1998)

The first-mover might also experience disadvantages when facing late entrants. The first-movers carry the heaviest burden, dealing with high risk as a result of entering uncertainty markets and also high innovation costs. Imitators can copy the concept at a considerably lower cost. Furthermore, the first-mover is the one who have to deal with the inertia
that might arise within the company and the market. (Lieberman & Montgomery, 1998)

Even though the first-mover might experience a great initial success, it is not necessarily a permanent condition. Companies with well-established leadership positions are in the same situation. (Lieberman & Montgomery, 1998) Environmental changes can create opportunities for competitors (Lieberman & Montgomery, 1998) and hence it is important for the company to quickly respond to these changes. (Stalk et al. 1992, in Lane & Bachmann, 2000)

We have been discussing the phenomenon of competitive advantage and what characteristics it might have. When the company has identified or created a competitive advantage it is important to pay careful attention to it in order make it sustainable, according to Lieberman & Montgomery (1998).

5.3.4. Sustainability

According to Porter (1996) it is not enough for a firm to have a unique position, since it will attract competitors trying to copy them. A sustained competitive advantage can therefore be described as having a value creating strategy, which is not simultaneously implemented by any current or potential competitor. Furthermore, other companies should be unable to duplicate the benefits from the strategy. If a strategy is based on the company’s resources, and these resources contribute to the implementation of strategies, the effectiveness and efficiency within the firm will be improved. Hence, the chance of having a sustainable competitive advantage increases. (Barney, 1991, in de Wit & Meyer, 2002) Zack (in Choo & Bontis, 2002) argues that knowledge can contribute to a sustainable advantage and that it is the fundamental basis of competition. Moreover, he is of the opinion that especially tacit knowledge is an unusual resource and valuable asset. The tacit knowledge emerges out of experience and it is embedded in complex organizational routines, which makes it hard to duplicate. Furthermore, if the unique existing knowledge that the company possesses is being integrated with
Porter (1996) argues that trade-offs are needed in order to keep a strategic position sustainable. Moreover, the trade-offs will occur when the firm has to make a choice between activities that are incompatible. This is a positive procedure that forces the company to limit its offers and think them through carefully before deciding. Porter (1996) mentions three reasons to why trade-offs occur:

1) If the company delivers two incomparable products at the same time, it may lead to confusion among customers and a lack of creditability. This is likely to occur if the company delivers a kind of value that is contradictory to its image or reputation. (Porter, 1996)

2) A firm’s position is dependent on various activities such as different behaviour among employees, different skills and different equipment. These trade-offs occur by themselves through activities, and they might loose their value if they are not in alignment with the customer’s demands. (Porter, 1996)

3) By deciding in what way a company should compete the organizational priorities are made, which will exclude alternatives that are inconsistent with the strategy decided. This sort of trade-offs arise from limits and control. In this case the trade-offs are favourable for the company, since the customers’ confusion will decrease when the company is not trying to be everything to everybody at once. (Porter, 1996)

In our opinion the issues of sustainability are crucial when operating in a network. The reason for this is that sustainability assures a long-term relationship from which the parties involved can benefit.

We began the Frame of Reference by presenting definitions of networks and how they are structured. We then continued with the internationalisation perspective of networks and further how the network
ought to be handled in order to be sustainable. Finally, we have been discussing the company’s strengths and weaknesses in order to identify its competitive advantages. These strengths and weaknesses can be used when the company is searching for appropriate network partners, who can be either similar or complementary.
Frame of Reference
6. Analysis

In order to be able to answer the purpose of this thesis, we will now analyse the empirical findings with help from the theoretical framework, as the third box of figure 8 demonstrates. Hence, the structure of the analysis will follow the structure of the Frame of Reference.

First we will analyse how LiU can cope with the tougher competition that Bologna Process implies by applying the theories concerning networks and internationalisation processes at LiU. We want to point out that the theories used will be interpreted in our own way in this chapter. This is done in order to make them more understandable and applicable on knowledge based organisations such as a university, since many of the theories take a starting point from a product or service company’s perspective. Thereafter we will continue with the analysis concerning the issues of communication, trust and inertia. These are vital factors in the network approach and hence in the internationalisation process. Finally we are going to analyse the competitive advantages that LiU might possess, and how the university can sustain them in the future.

Once again we will emphasize that this chapter can serve as a basis for other universities as well, even though the university analysed is LiU. We believe it can be a source for getting new ideas and inspiration, both from LiU’s work regarding the Bologna Process, but foremost from our discussions and analyse.
6.1. LiU’s networks and its internationalisation

We will begin our analysis by using the network theories and see how LiU can use the network approach as means for internationalisation. We will further analyse the internationalisation of LiU, that is, how internationalised the university is at present. This is crucial to know in order to create the most suitable strategy for the future, with the Bologna Process as a starting point.

6.1.1. LiU’s networks

We have chosen to describe LiU’s relations and its form of network in the model illustrated below. This model is inspired by the model of Axelsson (1996) presented in 5.1.1. We have developed the original model in order to demonstrate the present networks of LiU. The new model is shown in figure 9. Axelsson (1996) stresses that the smallest number of parties that a network can consist of is three, a so-called triad. We interpret the triad as the relations between teachers (suppliers), students (customers) and foreign universities (suppliers and customers). In the definition of foreign universities both the teachers and the students are included. To explain this further, we are of the opinion that Swedish students at LiU get in contact with exchange students, Swedish researchers with foreign researchers and Swedish teachers with foreign teachers. Hence, these groups are forming separate networks. Furthermore Swedish students get in contact with foreign teachers when studying abroad, and the case is the same regarding foreign students coming to Sweden.
In the model there is a dashed line between teachers and researchers, and the researchers and students, which signifies that the relations between them are quite weak. We think it is important that these lines are reinforced due to an increase in the co-operation between the two parties. In accordance with Sandewall, we also think that the connection between the students and the researchers at LiU needs to be improved. A way to develop and strengthen this relationship could be to integrate the researchers more in the students’ education, through letting the researchers hold lectures about their area of research. A stronger relationship might facilitate the recruitment of new researchers, since the students will get a better insight in what kind of research that is going on at. The relationship between the researchers at LiU and the society can be defined as a dyad according to Axelsson (1996). The society uses the researcher at LiU to investigate and solve problems and hence the researchers get commissions from the society (www.liu.se, 4). We believe that a stronger relationship between the students and researchers could lead to that the students become more up-dated about the on-going research in their area of interest. It will give the students a confirmation of that the education is not only an academic matter, it is actually anchored in the real world. Furthermore, we are of the opinion that this connection can be an important strength for LiU and an opportunity for the university to distinguish itself from other European universities. It is also important to emphasize that the network and its relationships
Analysis

described, are only a fraction of a bigger network. We have chosen to illustrate the foreign universities as one entity. In reality they represent numerous entities. Moreover, each of the universities has similar networks as the one that LiU has and hence the total network is very extensive. This will be further discussed using the theory of Van der Ven & Ferry (1980, in Axelsson 1996)

Van der Ven & Ferry (1980, in Axelsson, 1996) distinguish two characteristics of a network that diverge from Axelsson’s (1996) definition. The authors claim that two groups that are connected compose a network, and the actors within it are both known and unknown to each other. Based on our previous discussion, that figure 9 only represents a fraction of the total network, we think that LiU is involved in this kind of network as well. The university co-operates with foreign universities, which in turn are co-operating with other universities. In this case the actors known to LiU can be seen as their partner universities. They are in the model represented by University X and University Z. The unknown actors is the partner of their partner universities, that is University Y. Rydberg thinks that these unknown relationships are important, because they can help creating new relationships with other universities through what he calls the snowball effect. However, there exist similarities between Axelsson’s (1996) model composed by triads and Van der Ven & Ferry’s (1980, in Axelsson, 1996) definition of networks as figure 10 below demonstrates.

Figure 10 LiU’s networks 2 (Own construction, 2004, inspired by Exempel på två typer av triader, Axelsson, 1996 p. 210)

Van der Ven & Ferry (1980, in Axelsson, 1996) furthermore stress that the parties act upon their own goals. We believe that the universities have different goals that it is necessary that they have that. On the other hand, we also find it necessary for them to have common goals concerning
issues such as the quality of the education. However, this will probably be easier to attain through the implementation of the Bologna Declaration, and the harmonization of the higher education system in Europe.

We are of the opinion that the networks that LiU has got with its partner universities can be seen as what Thorelli (1986, in Jarillo 1988) calls horizontal networks. The partner universities are not seen as competitors, but as co-operational partners with the same rights. This corresponds with the definition that horizontal networks are built on a co-operation where no partner is dominating. (Thorelli, 1986, in Jarillo 1988) Furthermore, we agree with Jarillo (1998) that a network could be a good way for a company to gain and sustain a competitive advantage towards competitors that are not part of the network. We think that it is very important for LiU to be a part of an international network, if it is to survive on the international student market in the future. The network would in this case open up the opportunity for an increase in student, teacher and researcher mobility, which according to Sandewall is a vital criterion for a university to be considered international. We agree with Sandewall´s definition of an international university, and hence we believe that the universities that are part of an international network will gain an advantage over the universities that are not. However, this presupposes that the universities in question want to take part in the international student market and not choosing to be a local university. This discussion leads us to how the structure of the network should be, which we will analyse next.

6.1.2. Network structures

The structure of LiU´s network can be seen as both tight and loose in accordance with Axelsson´s (1996) definition. The tight relationships can especially be seen within the networks between researchers from LiU and its research partners from all over the world. Rydberg claims the importance of these networks by stating that the research would not be worth anything without them. Furthermore, the structure can be described as tight in the sense of the strong relationships that exist between the employees at LiU who handle the co-ordination and the co-
ordinators at its partner universities. Due to Axberg-Ahlsson, the visits at the partner universities facilitate the understanding of how things work there, and they make the roles more clear, which is a condition for a tight network according to Axelsson (1996)

As described in figure 9 the relations between the students at LiU and the researchers need to be improved, since their activities are not tightly linked. We believe that the researchers should be seen as a resource in the education of students, which is not the case at LiU today, according to our own experiences. This lack of relation between the parties indicates a loose network. We are of the opinion that a tighter co-operation between researchers and teachers, in terms of e.g. giving lectures, could result in an increase in the students’ interest in the research areas. This can further lead to that the students get more interested in research and want to continue with it after the graduation.

The social interaction, between employees at LiU and employees at the partner universities are based on strong personal bonds, according to Axberg-Ahlsson. That is also confirmed by the investigation made by the National Agency for Higher Education. Nevertheless, these relations can have a negative side in the sense that they make the co-ordination of activities more difficult. This is due to the fact that if LiU is refusing its partner university something that it asks for, it can damage their relationship. (Axberg-Ahlsson) When it comes to the interaction between foreign students and Swedish ones at LiU, we believe that it is quite high thanks to the ESN organization. ESN provides almost all the foreign students who come to LiU with a Swedish peer student. (Kihlborg) However, the experience of being a peer student has taught us that some relations with the exchange students are long-lasting while other diminishes by time. However, we do not consider this a big problem, since it is the same with many personal relations. This development is in alignment with Håkansson & Shnehota (1995) who argue that the relationships between companies change in content and strength during the pace of time. The Alumni-activities created at LiU, can be seen as another example of an intent to strengthen its social interaction with its students and make the relationship long-lasting.
Regarding the number of partner universities that LiU should have in the future, there were two main opinions. One opinion was that it would be better to have less partner universities in order to improve the relation, and get to know them better. (Axberg–Ahlsson, Kihlberg, Millnert) The other opinion was the opposite. Lundquist stresses that it is not in alignment with the Bologna Declaration to say no to universities that approach LiU with the intention of starting a co-operation. Moreover, Rydberg is of the opinion that having several partners facilitates the process of getting more partner universities all over the world. We have found no theories about the number of partners that is idealistic and we therefore believe that the number is depending on the circumstances, line of business, and the purpose with co-operation. We believe that our choice of the network approach as a way of internationalisation is more in line with having a limited number of partners, in order to fully make use of them. Furthermore, we believe that the number ought to be in relation to what the partners can provide. Nevertheless, Egan (2001) is of the opinion that companies should encourage their employees to create networks that can be valuable in terms of knowledge. The author also stresses that the social relations keep it together. We believe it is important that LiU decides what the purpose with its network is and what it wants to achieve with it. If the university wants to keep the network tight, we agree with Egan (2001) that the social relations are an essential part of doing so. In that case, it could be a good thing to have a limited number of partners, and pay attention to the relations that already exist. However, we think that the most important thing is that the employees at LiU are unanimous of the purpose of the co-operation. This seems not to be the case today, since the answers we got were contradictory. We think this depends mostly on a lack of communication and discussing these issues. We therefore agree with the respondents that meant that a strategy group ought to be formed, in order to prevent that the employees go against each other. The strategy group would be common for the whole university. Such a strategy group will be further discussed in section, 6.2.1. of the analysis.
Analysis

6.1.3. Motives for networking

As recently mentioned, we believe it to be essential for LiU to decide what their motives are for networking. One step in that direction is to decide what kind of partners it wants in the network. Does LiU want to cooperate with universities that have similar educational areas, or does it want universities that are complementing? Millner and Sandewall are of the opinion that the latter is the best alternative, in order to strengthen the perspectives of the education. Furthermore it would give the students the possibility to study subjects not available at their home university. According to Contractor & Lorange (1988) this coordination of the partners’ resources and capabilities is a way to try to improve the competitiveness, which can be achieved through improved products and better market access. In our case, the improved products can be seen as improved educational quality, imposed by better co-operation between LiU and its partner universities. The improvement of quality is also one of the criteria of the Bologna Declaration. However, we do not think that having a complementary partner is enough in order to cope with the changing environment that the Bologna Process implies. We also think that the teacher and student mobility needs to be improved in order to increase the educational quality at LiU further. An increased mobility will provide the university with new ideas and perspectives on the education, which the students and teachers have embraced during their exchange period.

Concerning the co-operation with the researchers at LiU and the partner universities, we think it is important that the partners are both complementary and alike. By this we mean that a mix of these two would be favourable. The similarities would make the researchers understand each other better. The differences would favour the discussion of problems and solutions, due to the researchers’ different ways of thinking and cultural backgrounds. This transfer of know-how is hardly obtained in another way than networking according to Håkansson & Snehota (1995, in Ebers, 1997). The authors also stress that another advantage with this course of action within the area of R&D, is that it is cost efficient, and Dogson (1993) claims it to be an efficient way of learning.
The Bologna Declaration implies structural changes, the creation and improvement of the European Higher Education Area, and a more extensive student market. According to Jaklic (1988) the globalisation of a business and an increase of its internationalisation demands knowledge, capital, high-quality products and services. These can be reasons for companies to co-operate. We are of the opinion that the best way for LiU to handle the changes and demands that the declaration implies, is through being a part of an international network. As recently mentioned, the co-operation can lead to improved quality of the education, but also to a more cost efficient research. The fact that LiU is considered a high quality university among Swedish students is reflected in recent polls. Furthermore, LiU has a good reputation abroad. Moreover, Lundquist emphasizes that there are many universities that approach LiU with the intention of starting a co-operational relation. These facts ought to make LiU an attractive partner and perhaps give it the opportunity to choose further members of the network.

6.1.4. Internationalisation

The Faculty of Arts and Sciences has a long tradition of internationalisation, and they have over 100 guest researchers annually. These researchers are performing R&D at LiU together with LiU’s own researchers and doctoral candidates. (www.liu.se, 2) According to Rydberg the internationalisation and the networks essential for the R&D. Jaklic (1998) strengthens this statement by claiming that networks create a great opportunity to accelerate in the internationalisation and development process. Nevertheless, he adds that an understanding of the management and function of the network is necessary if it is to be effective. Edvardsson et al. (1992) also support Rydberg’s statement. They are of the opinion that R&D plays an important role in understanding the process of internationalisation. The authors also stress that this development demands financial support. The R&D activities at LiU are to great extent supported by the County Council in Östergötland. The university also gets support from Swedish companies that hand out important research assignments to the researcher. This investment is very
Analysis

important according to Edvardsson et al. (1992), since they claim that R&D is essential to a knowledge intensive organisation. This is due to the fact that R&D has a long-term effect on knowledge capital, which is significant for success in knowledge intensive organisations. Another reason that shows the importance of investment from outside the university is that LiU is free of charge for students. (Sandewall) A result of this is that the university does not get any financial support from the students that could be used to finance the research and the education.

All universities in Sweden are free of charge, which decreases their motive to invest in marketing (Sandewall). Despite this, some effort can be noticed concerning marketing the Swedish universities towards foreign students, e.g. through the catalogue “Study in Sweden”. Edvardsson et al. (1992) are of the opinion that marketing is necessary to develop a co-operation with the customers, in our case students, but also in order to create new investment possibilities. We agree with this and believe that international marketing is more important than the Swedish universities seem to realize. LiU market itself mainly through its homepage, since it is easier to keep updated than its marketing catalogues. However, one exchange student was not very impressed by either LiU’s homepage, or the printed marketing material. The exchange student described it as boring and thought it could be improved a lot. According to Edvardsson et al. (1992) a company must create a positive image and favourable expectations through its marketing. We believe that this is true and that LiU does not accomplish these marketing goals completely, based on the statements from the exchange students. Furthermore, we think that it is not sufficient to have a homepage that is up-dated with the latest information. It also needs to be attractive and “flashy” as well. Moreover, we are of the opinion that the marketing catalogues and information material need to be improved. Despite that this procedure is costly and that courses get changed, it would be a good investment. The answers we got from the exchange students, Axberg-Ahlsson, Kihlborg and Sandewall imply that there are various reasons to why foreign students chose to study at LiU. The courses and programmes offered were not the main reasons. Hence, we do not think that LiU’s marketing catalogues only should contain information about its courses. We are of the opinion that these catalogues should be composed of information about the university,
Linköping as both a cultural and modern city, and the variety of activities that is offered. Furthermore, we think that it should contain a lot of beautiful pictures and former exchange students’ opinions about LiU. The latter we find particularly important, since our experience tell us that students tend to trust other students to a greater extent than they trust e.g. the exchange co-ordinator.

Moreover, creating a database for the exchange students at LiU could also be a good idea. Such a database ought to contain a “graffiti board” where the exchange students could write their opinions about LiU and their stay there. It should have a similar character as the graffiti board for the new students at LiU. The important is that it invites and encourages the exchange students to write their opinions there. The database would be beneficial for LiU, in the sense that it could make the university aware of its image in the rest of the world. As mentioned before, Edvardson et al. (1992) claim that a company is dependent upon having a positive image. We therefore think that creating this database would be a step in the right direction for LiU. If this database becomes reality, we are of the opinion that LiU should link it, or refer to it, in the marketing catalogue. Another alternative for the university to get a picture of its image could be to visit the databases of other universities from where LiU has received exchange students to see what they have written about LiU there.

In order to study LiU’s internationalisation process as part of a greater whole, we will now discuss it in alignment with the 3P model by Luostarinen & Hellaman. (1994, in Jaklic, 1998) This theory is not completely applicable on our chosen subject. However, we will use it as a starting point for discussing the internationalisation of LiU. Moreover, we have made our own interpretation of it, and hence use it as a tool to facilitate the explanation of LiU’s position in the internationalisation process. We have placed LiU in-between the independent and interdependent phases in the 3P model. The reason for this position will be explained in the discussion below.
Dependent
We believe that LiU has passed the first step in the 3P model, the dependent phase. Concerning A) in the model, we translate the importation of products and services as the teacher and student mobility, between LiU and its partner universities. The products can be seen as the foreign exchange students, who are formed by the educational system, and the culture from their home country. The product also includes the foreign teachers and researcher who come to LiU. The importation of services can be translated into the guest lectures that the foreign teachers hold at LiU, and the contribution from researchers concerning mutual research areas. We are of the opinion that the great extent of courses offered in English at LiU, have positive impact on the importation, which will facilitate the communication.

Figure 11 LiU’s position in The Three-Phase Internationlization Model (Jaklic, 1998, p.367)
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The networks that LiU are participating in include interchange between universities. Furthermore, it includes personal relationships at different levels that are involved in the various relations. Axberg-Ahlsson states that some of the relationships are stronger than others are. Furthermore, she thinks the co-operation with countries that have a culture similar to the Swedish works more smoothly. This can be translated into alternative B) that implies different kind of co-operation with foreign partners. The different types of co-operation can be translated to the various agreements between LiU and its partner universities. In this case, the contracts are made between the universities, e.g. company to company, not company to buyer as Jaklic (1988) claims. The different kinds of networks in the dependent phase are implying that the company will be dependent on its partners. Nevertheless, it offers a great opportunity of learning. We believe that this could have been the situation of LiU’s relationships in the past, when it was an unknown university internationally. Then LiU had not the possibility to choose its partners to the same extent that is possible today. However, the agreements, although having a dependent character, should be beneficial for the students or the buyers in the end.

The teacher and student mobility between LiU and its partner universities are not a one way path. LiU is receiving foreign people, but it is also sending its students, teachers and researchers abroad, to foreign universities. This brings us further to C), which implies exportation. Our reasoning concerning the exportation is the same as in A). With the reasoning concerning this matter, we believe that LiU can be seen as an export trading company.

Even though LiU can be seen as using, or have been using, all three modes of the dependent phase, we believe that the most applicable of them was alternative B). We base this on the fact that it implies networking, and also learning. Hence this is a good point to start from when beginning an internationalisation process. We believe, as mentioned earlier, that this describes LiU when they started their internationalisation better than the present situation.
Independent
LiU has a responsibility to inform and market their partner universities towards the students, and the same counts for the partner universities. (Axberg-Ahlsson) This marketing takes place during a theme-day concerning studying abroad, according to Kihlborg. This can be applied on the second phase of the 3P model. Bartlett & Ghoshal (1992, in Jaklic, 1998) also claim that selling through agents is included in this step. The partner universities that market LiU to their students, are in this case the agents. Furthermore, we believe that the students, teachers and researchers, should be seen as more than “imported and exported products and services”. The people who go abroad and the ones who come to LiU are to be seen as ambassadors for LiU (Axberg-Ahlsson) and hence also as selling agents. Many of the exchange students have got friends who have previously been studying at LiU (Kihlborg). We think that this is an indication of that the students work as selling agents for LiU.

Bartlett & Ghoshal (1992 in Jaklic, 1998) also mention three mentalities in the second phase, the international, the multinational and the global mentality. These mentalities indicate different degrees of internationalisation, and they have a clear connection with profit making firms. However, we will discuss them and relate them to our chosen subject.

• The international enterprise opens headquarters and subsidiaries that the firm has abroad (Bartlett & Ghoshal, 1992 in Jaklic, 1998). LiU has no subsidiaries abroad and we believe it has no intention to have it either. However, we think that the countries that have signed the Bologna Declaration, can be compared to a jointly headquarter abroad. Each member country has representatives who together discuss and work out recommendations for the higher education in Europe. (http://utbildning.regeringen.se, 8) We believe that these committees have similarities with a company’s headquarters. This is due to the fact that they make the main decisions about how the education should be structured, which the universities in the signatory countries have to follow.
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We do not think that LiU can be described as an international enterprise in alignment with this definition. The aim with our discussion here is to point out that LiU has an international touch, and that it is part of a big network. In a way the Bologna Declaration implies that the Swedish universities loose some of their decision making power, concerning how their educations should be structured. The fundamental principles are stipulated in the declaration. However it is the task of the Swedish Government to interpret the declaration and to decide how it should be implemented in Sweden. Furthermore, the universities can choose not to change in accordance with the governmental decisions regarding some of topics, such as the ECTS grades. (Millnert, Rydberg) Nevertheless, we are of the opinion that this is a positive development. We believe that the Bologna Declaration will result in improved quality of the educations at LiU since the Bologna Process offers the opportunity to revise them.

- As mention in the previous part, LiU has neither subsidiaries nor independent companies in terms of production placed abroad. Hence we do not see that LiU fits into Bartlett & Ghoshal’s (1992 in Jaklic, 1998) description of a multinational enterprise at all.

- LiU must follow the directives that the Swedish Government promulgates regarding the Swedish higher education, at least to a certain extent. The Swedish Government in turn receives its directives from the Bologna Declaration that the signatory countries have agreed on. (http://utbildning.regeringen.se, 8) Bartlett & Ghoshal (1992 in Jaklic, 1998) state that a global enterprise is managed from one centre and that its production is located in a few efficient factories. From the reasoning above, LiU is not completely managed from one centre. It got directives both through the Bologna Declaration, the Swedish Government and the university board, concerning the design of its education. However, LiU’s production, its creation of knowledge, aims at a global student market, which the authors stress is a factor that makes an enterprise global.
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We conclude that LiU partly fits in to the description of step number two in the 3P model. It corresponds to the part when the selling is made through an agent. The part that fails to tally is the description of the mentalities. However, we can see some weak connections, between LiU and the definition of an international and a global enterprise. Nevertheless, LiU does not fulfil these criteria completely.

Interdependent
LiU has adapted itself rather well in alignment with the third phase of the 3P model. One example of that is the large number of courses and master programmes offered in English. (www.liu.se, 2) We believe that these courses are necessary in order to attract foreign students to LiU, since Swedish is not an extended language. According to Jaklic (1988) a transnational enterprise should adapt to local needs. We are of the opinion that there is no need for LiU to adapt to local needs, since it does not have the intentions of open subsidiaries outside Sweden. However, we believe that the adjustment made concerning the courses offered is important. This could be seen as an adaptation to the local needs of the European Higher Education Area. We believe that the implementation of the different parts of the Bologna Process would, in that sense, make LiU even more adjusted to the local needs of Europe.

LiU has already a well-established international network, especially between researchers at various universities. (www.liu.se, 2) According to Jaklic (1998) this is a sign that it is a transnational enterprise. Another reason for LiU to be considered to belong to this type of enterprise is that its R&D is spread around the world. By this we do not mean that LiU has different R&D establishments all over the world. Instead, we include the researchers from LiU who go abroad to carry on research, to this category. We are of the opinion that these researchers receive new knowledge and input on their stays abroad, which they can bring back to LiU. Furthermore, we think that the foreign researchers, who come to LiU, can help improving the quality of the research, by the contribution of their experiences.

As in the case with the second phase, LiU does not correspond completely to the definition of the third phase in the 3P model. To a certain extent,
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LiU has some similarities with a transnational enterprise, e.g. its international networks. When it comes to other aspects, like the adjustment to local needs, we can see some connections. However, these aspects need to be further elaborated, if LiU is to be considered a transnational enterprise.

Based on our discussion about the 3P model we interpret that LiU´s position in the internationalisation process is between the independent and interdependent step. The reason for this chosen position is based on the discussions above. We do not think that LiU fulfils the all the criteria of the independent or the interdependent step. However, it fulfils some of the criteria in both of the steps and hence we have placed LiU in-between.

We have been analysing the kind of networks that would be suitable for LiU and how its internationalisation process may look like. As a logical consequence of this we will continue by analysing the relationships within a network and how to handle them.

6.2. The relationships and changes within LiU´s network

In this part we will analyse how the relations within LiU´s network could be handled in a good way. We will start with analysing the communication within LiU´s network. Then we will continue with analysing the trust that exists in the networks that LiU is involved in, with help from the theories in the Frame of Reference. Finally, the inertia that exists at LiU, as a result of the changes imposed by the Bologna Process, will be analysed.

6.2.1. Communication

The answers we received from the respondents concerning the communication differ depending on the issue of concern. Therefore we have chosen to divide this part into three sections. In the first one we analyse the communication towards the students at LiU. The second
section deals with the communication towards the employees. Finally, some alternatives concerning how LiU could improve the communication within its network are analysed.

Students
The information that the students get about the exchange possibilities is not sufficient. This is indicated by the insecurity of whether or not they will get the courses from a foreign university approved, and as they are not aware of the advantages the exchange it implies. Therefore it is important that the teachers inform the students about foreign universities that have courses that fit the students’ educational direction. (Axberg-Ahlsson, Sandewall) It is important to have a good communication, since a dialogue contributes to awareness and understanding (von Krogh & Roos, 1996). We agree with the authors and we believe that communication is essential to encourage student mobility. We think that the increasing number of incoming students is a result of good communication at these students’ home universities. The exchange students we talked to said they would recommend their friends to study at LiU, and many of them had friends who had been studying at the university before. Furthermore the number of exchange students increased despite there was no extra marketing effort or persuasion done.

Teachers and researchers
During our interviews we have noticed that communication is a crucial factor regarding the implementation of the Bologna Process. First of all, different languages can restrain the teacher mobility through making the teachers feel insecure of teaching in another language, and in another country. Furthermore, some teachers do not mention that they feel a need to be supported by getting language training. (Sandewall) Since this is the case, we agree with Chio & Kelemen (1995) that communication should get more attention as it contributes to a broader understanding and awareness. Moreover, we think that the Faculty of Technology at LiU is a good model, with its increasing number of teacher exchange. According to Axberg-Ahlsson, the increase depends on the enthusiastic coordinator. However, we believe that it is also a result of good communication, and of positive experiences that the teachers have shared with their colleagues. Moreover, we agree with Leenders et al. (2003) who stress that the
communication increase are likely to happen among people with similar background or expertise, which in this case represents the teacher profession.

There is a need for a co-ordinator that can handle the foreign teachers and researchers who visit LiU and their possibilities to give lectures. (Sandewall) We are of the opinion that this person also could arrange meetings that bring the foreign teachers and researchers together with teachers and researchers from LiU’s different departments. The reason for this is that such procedure can result in development of new ideas and a broader understanding of the teachers’ and researchers’ actions according to Von Krogh & Roos (1996).

The communication between employees from different partner universities does not only occur face to face, but also through e-mail and telephone. (Axberg-Ahlsson) According to Leenders et al. (2003) Internet represents a good alternative of communication, since it is time efficient and restricts some interactions. However, a negative side of the communication between LiU and its partner universities is remarkable. When the relationship is tight and personal relationships are involved, it is difficult to say no when the partner wants to stretch the limits (Axberg-Ahlsson). This indicates that the communication network, in this case, is decentralized according to the definition of Leenders et al. (2003). These authors argue that in this type of network each member will be engaged in the process of finding solutions to problems, and make a contribution to it. One example of this can be that LiU tries to receive an extra student from a partner university and hence makes an exception, despite that the period of application has passed. (Axberg-Ahlsson) However, the fact that some of LiU’s relationships are stronger than others, and the partners from Europe sometimes are easier to co-operate with, can be a result of the short distance and the increasing communication that this can imply. (Leenders et al. 2003)

The various interpretations of the ECTS grading scale at the Swedish universities is a good example of the lack of communication and information that exists. (Lundquist) We believe that the fact that some teachers connect the ECTS grades with the old Swedish grading scale from
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one to five, strengthen this assertion. Furthermore, we see it as a sign of mental blocks, since the ECTS scale has noting in common with the old scale, according to Lundquist. Von Krogh and Roos (1996) are of the opinion that a good conversation can result in more effective and faster strategic decision. We are therefore of the opinion that it is necessary for LiU to improve its communication between the persons who know a lot about the Bologna Process, and the people who does not. This will facilitate the implementation of the ECTS system as well as the other pieces of the declaration. Furthermore, we also think it is important to improve the information between the teachers and students in these matters, since we experience it to be more or less non-existing at the present.

Measures regarding the communication at LiU

The strategic decisions of how to implement the Bologna Process at LiU should be decided at the top-level, in other words by a special group set up by the vice-chancellor consisting of competent persons within this area. (Sandewall) We agree with this idea. The reason for this is that we think that such a procedure would prevent the faculties at LiU to develop their own implementation strategies based on their own interpretations of what the Bologna Process implies. Furthermore, we think that sub-groups from the different faculties should be set up, consisting of both student students and employees at the university. These groups should also be represented in the comprehensive strategy group. We believe that this could be a good way to spread the communication throughout the university system, since the students in the group will talk to their friends, and the teacher with their colleagues and so on. This tight internal communication proposed, based on teams that aim to increase the members’ participation, can be described as a decentralized network. (Leenders et al. 2003)

6.2.2. Trust

According to Lundquist, trust is very important in a relationship and there is no use to have a co-operation with another university if there is no mutual trust between them. This opinion is in alignment with von
Krogh & Roos (1996) who stress that if the parties can not trust each other, the co-operation will be threatened, and the learning and knowledge transfer will be limited. Teachers, who collaborate with other teachers at partner universities, therefore have to trust each other, and believe that their partners teach as well as themselves. Furthermore, LiU has to be as honest to other universities as it wants them to be back. (Lundquist) Kanter (1994 in de Wit & Meyer, 2002) confirms this statement and is of the opinion that the more trust that exists in a relationship, the better it can develop, and the more open-ended it could be. Trust can also be defined as key factor that makes the exchange within the organisation more successful. (Choi & Kelemen, 1995)

Buckley & Casson (1985) argue that trust normally will be much stronger between members of the same extended family. Axberg-Ahlsson confirms this through pointing out that it is easier to collaborate with the countries from northern Europe. She thinks the reason for this is that their culture and attitude are similar to the Swedish ones. We believe, in accordance with Brenkert (1994, in Lane & Bachmann, 2000), that people with different values can trust each other. The trust between teachers from different universities can occur if the relationship is built on some common values or aims. We find it likely that teachers within the same area share some common beliefs, and hence have a ground for trust. Furthermore, we think it is important that the relationship is considered to be long-term, This is in alignment with Jarillo (1998, in de Wit & Meyer, 2002) who stress that this is essential for the development of trust, and a base for it to be valuable. Another author who also strengthens this argument of a long term based relationship is Killing (in Contractor & Lorange, 1988). He stresses that the trust is high if partners already have established a degree of trust through former co-operation.

However, we believe that the high level of trust is not always positive for the relationships. One example of this is the personal relationships between employees at LiU and its partner universities. The partners expect each other to make exceptions and to help each other to solve problems. (Axberg-Ahlsson) We believe it is a good thing that they are trying to solve problems together, but it is dangerous to stretch the limits too much. Moreover, if these exceptions are made at LiU they can cause
administrational problems and irritations among the people who have to handle it. Furthermore, it can be difficult to say no to a close co-operational partner in order to avoid a conflict. (Axberg-Ahlsson) Because of this we disagree to some extent with Buckley & Casson (1985) that argue that trust is a social phenomenon, which makes the work within organisations easier. We are of the opinion that trust often facilitates the work, but if the trust is too high, it could also have the opposite effect. Nevertheless, if the relation is kept on a professional level and hence is not too personal, the trust will probably function as Buckley & Casson (1985) describe it.

As described above, the co-operations of LiU can be considered to be based on trust through shared meanings. We will hence not analyse LiU in terms of the relationships based on power in the model by Hardy et al. (in Lane & Bachmann, 2000). This means that we exclude Manipulation and Capitulation from the model, and it leaves us with the following figure:

<table>
<thead>
<tr>
<th></th>
<th>Spontaneous</th>
<th>Generated trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of co-operation</td>
<td>Co-operation is trust based</td>
<td>Co-operation is trust based</td>
</tr>
<tr>
<td>Dynamics of co-operation</td>
<td>Co-operation emerges naturally, through gamble</td>
<td>Co-operation is achieved through management of meaning</td>
</tr>
<tr>
<td>Synergy, innovation, and risk</td>
<td>Trust emerges spontaneously: synergy is high; risk is high</td>
<td>Trust is created through equal participation which increases synergy but also increases risk</td>
</tr>
<tr>
<td>Power</td>
<td>A ‘win-win’ view of power is implicit although power is largely ignored</td>
<td>A ‘win-win’ view of power prevails as asymmetrical power is decreased</td>
</tr>
<tr>
<td>Meaning</td>
<td>Shared meaning already exists between partners</td>
<td>Shared meaning is mutually constructed by all partners</td>
</tr>
<tr>
<td>Implications for research/practice</td>
<td>Shared meaning may not be as ‘spontaneous’ as it may appear</td>
<td>Process creating shared meaning is difficult and may involve conflict</td>
</tr>
</tbody>
</table>

**Figure 12:** Forms and façades of trust (Own revision of Hardy et al. in Lane and Bachmann, 2000, p. 79)
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Spontaneous trust
None of the information gathered by us indicates that the trust that exists between LiU and its partner universities has emerged spontaneously and without any deliberate intent. Furthermore, there is no sign of shared meaning of symbols between LiU and its partner universities, which Hardy et al. (in Lane & Bachmann, 2000) refer to as a criterion for the spontaneous trust category. However, we agree with the authors that trust can emerge through communication when shared meaning already exists. This will be described further in the section of generated trust.

Generated trust
The foreign universities that approach LiU with the intent of co-operating, they have already an idea of what LiU stands for, its qualities, and they consider it to be a good partner. (Lundquist) We therefore believe that the parties have some sort of shared meanings at the beginning of the relationship, which is the base for the co-operation that becomes mutually constructed over time. We are of the opinion that LiU is best described through Hardy’s et al. (in Lane & Bachmann, 2000) definition of generated trust. The authors stress that trust is created by shared meanings, which is mutually constructed. Once again, we think that all the exceptions that LiU makes in order to support its partner university is a good example of the creation of mutual trust. However, we have recently pointed out that a high degree of trust can have a negative effect on a relationship. In the case of LiU, the employees seem to be afraid to deny application forms that are handed in too late. We think that if LiU and its partners stuck to their principles and tried not to be afraid of conflicts, it could in fact be a healthy development for both. Conflicts can result in the creation of shared meanings between partners and synergetic outcomes (Hardy et al. in Lane & Bachmann, 2000).

6.2.3. Inertia

The Bologna Process implies contextual changes for universities in the signatory countries, both in terms of structure and strategic choices. Rummelt (1995, in de Wit & Meyer, 2002) stresses that difficulties
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attached to these changes are likely to occur and cause inertia. We will in this section analyse whether or not this is the case at LiU as a result of the Bologna Declaration. The discussion about inertia will be carried through using the concepts of distorted perception, dulled motivation, failed creative response, political dreadlocks and action disconnects.

**Distorted perception**

We believe that this type of inertia can be distinguished at LiU, since the whole concept of the Bologna Process and its implications in the future is hard to predict. This is evident since the first discussions about the process started about ten years ago, and the Swedish Government will come with a proposition of how in should be implemented in the Swedish universities in February 2004, thirteen years later. (Lundquist) Other information that indicates that LiU suffer from this kind of inertia is the lack of communication and information concerning the importance of student and teacher mobility. The information gathered through our interviews’ shows that some people at LiU are aware of the importance of information. However we think that LiU does not act in accordance with it, which might lead to a decrease in the student and teacher mobility. This in turn will probably have a negative future effect on LiU if wants to be considered an international university. Another consequence that the lack of information can contribute to, among other things, is resistance towards the implementation of the ECTS grading scale. This kind of inertia is not good for LiU in the long run. We are of the opinion that it could result in that LiU only implements the things that the Swedish Government requires. Furthermore, if LiU does not act long-term, it will get even more behind in the development compared to many European universities.

**Dulled motivation**

The rather small number of teachers that are going abroad on exchange can be explained through the fact that they do not get any special benefits or support for doing it (Sandewall). This in turn can lead to that the teachers feel a lack of motivation and inertia emerges. According to Rummelt (1995, in de Wit & Meyer, 2002), the resistance to changes can depend on lack of motivation. We can see a clear connection with his theory and the low number of teachers at LiU who are going abroad.
Hence, we are of the opinion that LiU needs to motivate its teachers to go abroad through giving them the support they need as well as benefits. The teachers will then feel more motivated to be part of the exchange since they get more appreciation and satisfaction out of it. In the long run we believe that this is a healthy development in the right direction, which could be beneficial to the university when going more international.

Failed creative response
We have not investigated whether or not there is a lack of trust between the employees at LiU and the management, which is the signification of what Rummelt (1995, in de Wit & Meyer, 2002) calls failed creative response. However, we think that it is important to point out, in agreement with the author, that it is essential for the employees to believe that the vision that the senior managers express today will be valued for tomorrow to avoid inertia. In accordance with this theory, we once again emphasize the importance of that LiU sets up a strategic group, which should work with the questions of how to implement the Bologna Process. We believe that this course of action will prevent inertia, which appears as a result of failed creative response. It will moreover strengthen the vision of the management and make it more reliable to the employees.

Political deadlocks
The lack of information about the content and implications of the Bologna Declaration can result in that employees interpret the signification differently, and hence create their own visions about it. In some cases, that interpretation can be distorted and incorrect. (Lundquist) According to Rummelt (1995, in de Wit & Meyer, 2002) if disagreements occur between managers and they have difficulties to combine their beliefs it result in inertia. We think that this can be a possible result for LiU, if the information that the employees receive about the Bologna Process will not be improved. The consequence could be that they create their own opinions, which might be contradictory to the ones of other employees'. Moreover, we think that it would be dangerous for LiU to let the different faculties decide how to interpret and implement the Bologna Process. This could lead to that the different faculties oppose each other, which creates inertia within the system and makes the implementation more difficult.
Rummelt (1995, in de Wit & Meyer, 2002) also argues that emotional values and norms can create inertia. A typical example of that is the resistance that some employees have got towards changing the Program of Master of Engineering into two parts, in accordance with the declaration. It seems like a strong belief among the employees is the issue here. This issue can be seen as the unwillingness to change a concept that has worked well for years. Furthermore, a change to the new system would be problematic in the sense that it would be harder to separate the master students from the ones who will be Engineers. (Lundquist) However, whether or not the Program of Master of Engineering actually has to change depends on the Swedish Government’s decision about the implementation of the undergraduate and graduate degrees, since it is a vocational education. This is the reality and we believe that much of the resistance is due to the uncertainty of which alternative it will be.

**Action disconnects**
The action disconnects is the last friction that Rummelt (1995, in de Wit & Meyer, 2002) mentions, and it can also be notable at LiU. The Bologna Process, and the broader student market that it will open up, imply a new situation for all the European universities. LiU and the majority of the other Swedish universities are still waiting for the report from the Swedish Government that will come in February 2004, and they have therefore not made any significant changes yet. This course of action has already resulted in a delay for the Swedish universities, with a few exceptions, in comparison to other European universities that have started their changing process. (Lundquist)

We also categorise the housing shortage in Linköping, and the resistance from Norrköping to help the exchange students, as this type of inertia. Before there were no housing problem, but it arose with the increasing number of exchange students coming to LiU. This is a new situation for both Linköping and Norrköping, which probably is the base for the inertia. However, we hope that this problem can be solved in order to prevent that the exchange students get a bad impression of LiU and Linköping due to the housing problem. We think that this inertia is unnecessary, Linköping and Norrköping ought to co-operate instead of
making it harder for each other. Furthermore, the recent campaign concerning the area of Linköping and Norrköping as Sweden’s fourth big-city region should also be an incentive to co-operate. However, the buses between the two Campuses are a good step in connecting the two cities and its students.

We have through analysing different kinds of inertia discovered that LiU suffers from inertia as a result of the Bologna Process. It is hence crucial to be aware of where and how the inertia can arise in order to deal with it as soon as possible. Furthermore, it is important that LiU is aware of its’ strengths and weaknesses, to be able to develop. Hence, we will deal with these issues in the next section of the analysis.

6.3. LiU’s competitive advantage

In this section we will analyse the empirical data together with the theoretical framework concerning competitive advantage. Through this discussion we will try to define LiU’s position. We will continue to analyse if LiU possesses resources that are imperfectly imitable. After that, an analyse concerning whether or not LiU can be seen as a first-mover will follow. This section will end with a discussion about possible future strategies for LiU, in order to sustain its competitive advantages.

6.3.1. Position

We have chosen to place LiU in Porter’s model “Three generic strategies” (1985 in de Wit & Meyer, 2002) in the differentiation square, not too far from the differentiation focus. This is demonstrated in figure 13 below.
There are several reasons for the selected position. First of all, the differentiation is chosen as LiU’s competitive advantage, since Swedish universities in general are free of charge. Another factor is that LiU has got the possibility to decide whether it will concentrate on being a local or an international university. (Sandewall) However, we are of the opinion that LiU already has made its choice to be an international university. We base this on the rather extensive exchange, on information found on LiU’s homepage and through the interviews. These sources confirm that LiU want to be considered an international university. Regarding the competitive scope we have placed LiU in the differentiation square, but close to the differentiation focus. This position depends on that LiU has got a quite broad target group, through offering a broad range of courses and programmes in Swedish, but also offers several master programmes in English (exchange students, Rydberg, www.liu.se, 3). However, Millner means that the university could be even broader, since some areas of education are not as extensive as others are. The exchange students think that the broad range of courses offered is valuable. Porter (1996) argues that it is important for the customers that the activities that the firm carries out are valuable, in order to satisfy the customers and to outperform rivals. The broad target is the reason to why the differentiation square is chosen. However, there are signs that LiU is close
Analysis

to the differentiation focus. One of them is the positive reputation that LiU has got according to the exchange students, which is further confirmed by the poll of the National Agency of Higher Education. The strive to be a international university further strengthens this position. Furthermore, we think that the ECTS-label that LiU has applied for is another sign of that it wants to improve its quality and reputation.

We believe that it is important for LiU to decide in which one of the two squares it wants to be. The international student market will demand a stronger educational niche for the universities, if they are going to participate in the international competition (Sandewall). We also think this procedure will be essential, if the universities are choosing complementary partners to co-operate with. This is further confirmed by Sandewall, who states that a university can not be good at everything, it has to choose some areas of specialisation. Hence, the dashed arrow implies the path we think LiU should chose in the future, in order to become an even stronger name at the European university market. It would imply a narrower target group for LiU than exists today and a high differentiation focus. We thereby go against Millnert and state that LiU ought to specialize and not broaden itself more. Moreover, we agree with Porter (1985, in de Wit & Meyer, 2002) that it is important that a firm continually improves it position through investments. We think that LiU can improve its position through making it clearer that it wants to be an international university, and create a strategy that follows this concept.

6.3.2. Imperfectly imitable resources

Different types of imperfectly imitable resources can be distinguished according to Barney. (1991, in de Wit & Meyer, 2002) We will analyse this using the three aspects of Barney, unique historical conditions, causal ambiguity and social complexity. We will discuss each of them, with the starting point in our empirical data and analyse if and how LiU fits in to these descriptions. The analysis serve to help us distinguish LiU’s resources that can be seen as imperfectly imitable resources and hence create a competitive advantage.
Analysis

Unique historical conditions
When LiU was founded in the 1960’s, the university chose another path than its predecessors. LiU thought in new lines compared to the others Swedish universities, and characterised itself as an interdisciplinary university. (Andersson, in ECTS practical guide 2002-2004) The latter can be noticed in the university’s offer of educational programmes that are combining humanities and social studies with computer science. (http://www.liu.se) This line of action, to chose a unique path, can be seen as a competitive advantage according to Barney (1991, in de Wit & Meyer, 2002) However, other universities will probably copy the strategy of LiU (Andersson, in ECTS practical guide 2002-2004). This kind of duplication can be seen as benchmarking, which will make the universities more homogenous (Porter, 1996). Furthermore this implies that the resources that LiU has can be obtained and copied by other universities. Since the possessing of valuable and rare resources compose the base for having a competitive advantage (Barney, 1991, in de Wit & Meyer, 2002), LiU could get difficulties in the future with managing the tougher competition.

Causally ambiguity
The fact that LiU offers a broad range of courses and master programmes in English (exchange student, Rydberg) can be seen as an advantage. However, we do not believe that it is imperfectly imitable, or fulfils the criteria for causal ambiguity, since it is possible for other universities to offer master programmes in English too. There is a possibility that the relationships between employees and LiU and its partner universities contain casual ambiguity. These relationships can be harder for other universities to copy, since they might be difficult to understand for someone outside the relationship. According to Barney (1991, in de Wit & Meyer, 2002) this can be seen as a competitive advantage. We therefore believe that it is important for LiU to build its competitive advantage on tight relationships, with the help from the teachers and researchers who are employed at the university. Since they are the ones who stay at LiU (Sandewall), the relations that they create with the partner universities can develop with time and become complex and hence hard to duplicate.
Analysis

This can be seen as a sustainable competitive advantage, according to the definition just mentioned.

Social complexity
The positive result from the poll that The National Agency for Higher Education carried out about the undergraduate studies in Sweden (Rydberg), can be beneficial in sense that it improves LiU’s reputation. According to various exchange students, LiU has got a good reputation in their countries. One of the respondents referred to the positive information written about LiU in a database. Moreover, this was one reason to why the student chose to study at LiU. Having a good reputation based on imperfectly imitable resources is a complex social phenomenon which Barney (1991, in de Wit & Meyer, 2002) address as a competitive advantage. Through the information gathered, we believe that LiU has got a competitive advantage created by its good reputation. However, other answers from exchange students showed that for example KTH has a better reputation than Linköping in their country, but they decided to study at LiU anyway. This decision was not only based on LiU’s reputation, but also the size of Linköping and its infrastructure together with the positive experiences that former exchange students had there. We believe that the employees at the university who are working with the reception, housing and various activities for the foreign students play an important role in creating a positive experience for the exchange students. Despite that there are a lot of exchange students coming to LiU, we have observed that the present student co-ordinator has got a personal relationship with many of them. These interpersonal relations can also be seen as a competitive advantage, according to Barney. (1991 in de Wit & Meyer, 2002)

Based on the discussion above, we believe that LiU fulfils, at least to some extent, all of the three combinations. According to Barney (1991 in de Wit & Meyer, 2002) these contribute to a competitive advantage that is hard to imitate. Nevertheless, by looking at LiU’s homepage and by being students at LiU for four and a half years, we got the impression that the university relies on its unique history. Hence, that is what LiU value as its biggest competitive advantage. Porter (1996) stresses that it is not enough for a firm to have a unique position in order to be sustainable,
because it will attract competitors. We therefore see a danger in that LiU relies too much on its unique history. This is due to the fact that other universities might copy it, e.g. nowadays there are several universities with interdisciplinary education programmes. If other universities are able to duplicate LiU’s strategy and improve it, it is possible that they call the students’ attention and that LiU looses its competitive advantage. Another problem at LiU is that some institutions are stuck in old patterns and do not think that they need to be changed (Axberg-Ahlsson). We agree with the authors Lieberman & Montgomery (1998) in this case. They stress that the organisations need to respond quickly to environmental changes in order to keep its competitive advantage. This is particularly important when the student market increases as a consequence of the Bologna Declaration. It is also of great importance that LiU tries to improve its current position and act upon it. The university ought to pay attention to its competitive advantage, since it is one of Lieberman & Montgomery´s (1998) criteria for keeping it. As pointed out earlier we are of the opinion that the personal relationships between the partner universities should be encouraged, as they often are complex and hard to copy, and thereby provide a competitive advantage.

6.3.3. First-mover

LiU can be seen as a first-mover compared to other Swedish universities, in accordance with Lieberman & Montgomery’s (1998) definition, regarding various subjects e.g. the implementation of PBL and the organisational structure of large institutions. This advantage that the university has together with its reputation can make the first-mover advantage durable. Moreover, it is often costly to attract the students away from the first-mover. (Lieberman & Montgomery, 1998).

We are of the opinion that the positive reactions from an exchange student about the combination of articles, journals and course-books during the courses at LiU should be mentioned here. This is something that perhaps needs to be pointed out in LiU’s marketing. We think that this makes LiU a modern university that applies both new and older literature, but also articles in the different subjects, and hence broadening
the students’ knowledge. This could create a first-mover advantage over other European universities that have not put this into practise. The first-mover advantage would in this case consist of the fact that LiU is the first one using this type of teaching. However, it is possible that other Swedish universities also apply this sort of teaching, and then LiU can not be seen as a first-mover unless it has developed goodwill with the student, or a positive reputation before the others. (Barney 1991, in de Wit & Meyer, 2002) Nevertheless, we are of the opinion that LiU can benefit from this whether it can be regarded as a first-mover or not through defensive marketing towards European universities.

Contextual changes can open up opportunities for competitors (Lieberman & Montgomery, 1998), which we think is the case with the Bologna Process. The process creates new possibilities for students, teachers and universities and it facilitates the mobility (Sandewall). According to Stalk et al. (1992, in Lane & Bachmann, 2000) it is important for an organisation to respond quickly to changes, which we think that LiU has done concerning the ECTS-label. If LiU were to receive the ECTS label, this could be an important step towards being a first-mover among the European universities in the Bologna Process. We believe that this would distinguish LiU from the large number of European universities, but also from the Swedish ones. Furthermore, it could create a competitive advantage over other universities that do not receive it. We believe that even if LiU does not receive the ECTS label, the university can be seen as a first-mover in the sense that the application demanded improvements that are beneficial. However, when it comes to the implementation of the ECTS system, LiU has not come very far. This could cause problems if LiU does not implement it relatively fast, since it will get behind the other European universities (Lundquist). Moreover, foreign students might decide not to study at LiU, since the credit and grading system are not in harmony with the rest of Europe, and hence could make future employment difficult. A good idea for LiU in this case could be to see how the Colleges of Chalmers and Jönköping have implemented this system and how it has functioned. The possibility to duplicate other universities implementation strategy could be very useful and beneficial. Lieberman & Montgomery (1998) state that the first-movers often have to deal with high risk, market uncertainties and
possibilities that inertia might arise. The followers avoid a lot of these consequences, since it can learn from the mistakes of the first-mover.

### 6.3.4. Sustainability

The teacher and researcher relationships that exist between LiU and its partner universities probably consist of what Zack (in Choo & Bontis, 2002) defines as tacit knowledge. The long time of co-operative experience that LiU has (www.liu.se, 2) and the experience that has emerged through the relationships, has led to that LiU has developed complex organizational routines (Axberg-Ahlsson). Zack (in Choo & Bontis, 2002) stresses that these relationships are hard to copy. As recently discussed LiU’s unique history implies that the knowledge it has created through the history also is unique. Zack (in Choo & Bontis, 2002) is of the opinion that the existing old knowledge that a company possesses together with new knowledge obtained through co-operation, can result in that it gets even more valuable. Again, we think it is important to point out the great advantage that teacher and researcher mobility implies. We believe that the relations LiU creates with other universities are invaluable.

In the future the universities in Sweden will either be local or international, and hence LiU has to decide which one of these two categories it wants to belong to (Sandewall). This can be seen as a trade-off (Porter, 1996), which implies that the firm has to make a choice between activities that are incompatible. LiU wants to be considered as an international university (www.liu.se, 3), so this choice is already made. It is positive that LiU has made this trade-off, since it according to Porter (1996) has to be done in order for the firm to keep its strategic position sustainable. Furthermore, this choice shows that LiU has decided to compete on the international market and hence made what Porter (1996) calls organizational priorities. In accordance with Porter’s theory (1996) these priorities are favourable for the university, since it will not try to be both local and global at once and this reduces the students’ confusion. Another trade-off that we believe that LiU has to do is to choose its position through demanding different skills and different equipment. In
the case of LiU we translate the different skills into the access to competent teachers and researchers. These people need to have knowledge in different educational areas. Furthermore, it would be preferable if their educational areas were different than other at European universities, in order to attract foreign students. When it comes to the different equipment we translate it into the access to foreign teachers who teach, researchers and students at LiU. We are of the opinion that this trade-off will strengthen LiU’s international position further through attracting students, teachers and researchers who have high ambitions. One reason for this is that people who are going abroad is often open-minded, interested in new cultures (Sandewall).

Finally, with the theory of Porter (1996) in mind, we think that it is of great importance that LiU works on being an international university, in order to avoid delivering a picture and values that are contradictory. Once again, we believe that evaluating the different educational areas at LiU could be helpful to determine whether the educations are international or not. This evaluation can be done by looking at the number of teachers who have been abroad, the international teachers who working at LiU, the foreign researchers, and the exchange students. This will then make it easier for the university to discover the educational areas that lack a touch of internationalisation and take measures in order to change it.

We have now analysed our empirical findings by using the theoretical framework. The main features were the kind of networks LiU should be engaged in, how to manage such networks and the competitive advantages that LiU can make use of to be a strong player in the European area of education. Hence, the next chapter will present our conclusions drawn from the analysis, which will then be used as basis for our recommendations.
7. Conclusion

We will now present our conclusions regarding how LiU should cope with the tougher competition implied by the Bologna Process. The chapter is structured in accordance with our research questions. Hence, the conclusion will begin with describing the future networks and the process of internationalisation. Then we will continue with how to handle the relationships within these networks. Finally we will present our conclusion about the competitive advantages of LiU and how to make them sustainable.

What kinds of networks could LiU make use of to cope with the tougher competition?

We have come to the conclusion that the networks that LiU should be a part of in the future ought to be rather small. Being part of smaller networks encourages close and tight relationships within them. Moreover, it would facilitate the exchange of students and teachers, and work as an incentive for increasing the exchange. Furthermore, the partners within the networks should be complementary in relation to each other. LiU must therefore evaluate the educational programmes and courses offered. Moreover, it needs to decide the educational focus and hence what it looks for in a future co-operational partner. We do not suggest a certain number of networks or a number of partners within the network, this depends on the character and direction of the specific network. Networks usually involve both co-operation and competition, which we believe can be healthy for the participants. The ideal networks for LiU would be horizontal ones, in the sense that all involved are equals and no one is dominating. This would make the character of the network more co-operational and less competitive. The fact that we believe that LiU would benefit most from co-operating with complementary partners strengthens this belief. However, a certain degree of competitiveness is also good in the sense that the partners constantly will be striving for an increase in quality and reputation.

Moreover, we believe that LiU needs to evaluate and re-create its internal networks, that is, the networks between the various faculties and
Conclusion

institutions. We have seen indications, especially in relation to the implementation of the Bologna Declaration that the faculties are operating individually instead of co-operating. This trend will prevent the creation of consensus around the issues concerning the Bologna Process. We therefore believe that a strategy group that embraces the whole university is necessary and that it has to be created soon. However, there are good examples of networking and co-operation over the faculty boundaries such as the interdisciplinary educations. We do feel that it is necessary not only to integrate different subjects and educations, but also to integrate different mentalities. The strategy group might be helpful in that area as well, since it would comprehend the whole university and only separate parts.

The internationalisation process of LiU is closely linked to its many international co-operations, agreements and the exchange of students and teachers. Hence, the university can be considered to be an international university. However, our analysis showed that the university can, and ought to do more about its internationalisation, especially with the Bologna Process in mind. The teacher exchange is not satisfactory. Therefore it is necessary with more incentives for teachers and for students as well, in order to increase the exchange. If the university really is international, this must be reflected in the students and teachers attitudes mainly concerning the exchange. For the students this attitude also includes that they should have a international perspective of their future labour market. We believe that the implementation of the Bologna Process will help changing these attitudes and hence the mentality of LiU from global to transnational. This is according to the 3P model decisive in order to reach the interdependent internationalisation phase. The 3P model illustrates that LiU has good potentials to succeed in the international market. However, in order to succeed it is important that LiU takes advantage of the internationalisation opportunities that the Bologna Process offers.
Conclusion

How should the relations within the network be handled in best possible way?
Several communication flaws can be noticed in LiU´s network. The students need to be better informed about the possibilities that an exchange implies and how to assimilate the courses chosen abroad. If the dialogue between the university and its students is improved, it is possible that the number of outgoing students will increase. This will in turn lead to that LiU got more “ambassadors” abroad, who can improve its reputation.

When it comes to the communication between the university and its employees, it does not work satisfactory either. There is small group of people who know a lot about the content of the Bologna Declaration, and a considerably larger group of people who do not have much knowledge about it. This latter group needs to be better informed about what the Bologna Declaration implies for them, and for the university as a whole. If the communication works well, it will prevent misunderstandings and different interpretations of the content of the Bologna Declaration. If misinterpretations can be avoided, it will facilitate the co-operation between the employees and the university, in the sense that they will not go against each other. We noticed different opinions about how LiU should implement the Bologna Process, which shows a lack of communication and an absence of a common future strategy. Furthermore, some interviewees were of the opinion that the different faculties worked separately instead of working together. The formation of a strategy group that works with the implementation of the Bologna Declaration could hence serve as a link between the Faculties, and improve the communication between them as well. However, a good sign of communication can be noticed in the increase of teacher exchange at one of LiU´s institutions. The reason for this increase constitutes of both a very enthusiastic co-ordinator, but also good communication between the teachers at this institution. This can thereby be seen as a proof that a good communication can increase the teacher mobility and hence give LiU a more international label.

The communication between LiU and its partner universities works quite well through contact by e-mail, telephone and visits. The visits are
important in order to create a close relationship with the partners and to get an awareness of how they work. However, if the personal relationships between the employees at the universities are very tight, it can be easier to support each other and make certain exceptions. Nevertheless, it can also get more difficult to resist a wish from the partner university.

If the communication works satisfactorily in a relationship the trust between the partners can increase, because of the shared meanings that the communication contributes to. Hence, trust is an essential part of a relationship. If the partners can not trust each other the relation will not work satisfactory. This is particularly important if the networks are small and complementary. In the case of LiU it implies trusting that the partner offer the same quality of the education as LiU does. The university therefore has to be as honest to its partner, as it wants its partner to be. The co-operation will work more smoothly if a high degree of trust is established. A high degree of trust between the partners will also strengthen the possibilities for the relationship to be long-term, beneficial and successful.

Furthermore, trust is an important factor to avoid inertia in a network. If the employees can not trust the management it can easily result in resistance and hence inertia. In LiU´s case various types of inertia can be noticed in connection to the Bologna Process. The majority of the inertia has its origin in the lack of communication at the university. The Bologna Process implies a new situation for the employees at LiU and they can easily misinterpret its signification in a negative manner, if they do not get informed properly. Furthermore, inertia can be noticed concerning the teacher exchange. The teachers who go abroad do not get any special benefits, despite that the exchange demands more work and effort. This fact can result in that their motivation to go on further exchanges decrease, which causes inertia. If the teachers who go abroad would benefit from it, the teacher exchange would probably increase. This increase could then result in a higher degree of internationalisation, which in turn increases the quality on the educations. The teacher exchange is particularly important, since the teachers create good relations with teachers at other universities, which could strengthen the network.
Furthermore, the student exchange should be based on relations that the teachers have created, not only on the researchers’ relations. Moreover the teachers should guide and encourage the students to go abroad on exchange. This is a further reason why the teachers should be more encouraged in their work and get rewarded for it.

It is also of great importance that LiU takes care of its exchange students and creates a good relationship with them. LiU has come far in this process, which the answers we received from the exchange students prove. They were very pleased with the reception, the activities arranged and the housing. LiU should therefore continue its good work and follow up that the foreign students have enjoyed their stay. This will contribute to keep and improve LiU’s positive reputation abroad. Furthermore, it is beneficial for LiU to create good relations with the exchange students, in order to recruit them to the research education.

What possible competitive advantages does LiU have, and how can they be developed and sustained?

At present LiU offers a broad range of courses, programmes and master programmes, both in English and Swedish. This makes LiU’s target group quite broad. The range of courses offered can be seen as an advantage. However, this advantage can easily be copied by other universities, which can result in that LiU’s advantage diminishes. Nevertheless, LiU’s advantage can be sustained if it can attract students by having a better reputation than the imitators. However, the broader student market that the Bologna Declaration implies will lead to a tougher competition among European universities. This development will probably result in that these universities will have to decide whether they want to be local or international. If LiU chooses the international alternative it ought to consider the range of courses offered. A university can not be good at everything, because that will not make it trustworthy. Therefore it is important for LiU to focus on its strengths and what makes it unique. This is especially important if LiU will be a part of an international network where the partners should complement each other.

Our interpretation of the information gathered is that it seems like LiU is relying to a great extent on its unique historical conditions, e.g. it’s
interdisciplinary programmes, its early exchange and its reputation. Furthermore, LiU is very proud of the broad range of courses offered and the high ranking that it got from a poll that the National Agency for Higher Education has carried through. These factors can be seen as competitive advantages, but it can be dangerous to rely on them too much. If the university does not work actively to maintain its reputation and offer better alternatives than other universities, the advantages will diminish. It is therefore important that LiU works on improving its quality and respond to the changing students’ needs. The Bologna Declaration offers a good opportunity for LiU to evaluate the education and its quality. Furthermore, it is also of great importance that LiU adapt to the changes that the declaration implies, e.g. the ECTS grades, ECTS credits and the degree levels suggested.

The tight and complex relationships that exist, especially between researchers at LiU and researchers at the partner universities, can be seen as an imperfectly imitable resource. This is due to the fact that these personal relationships can be hard for an outsider to understand and hence to copy. The complex personal relationships that LiU creates in its international networks are very valuable, since they constitute a sustainable competitive advantage. Furthermore, it is an advantage if these relationships are long-term and built on trust. Since this is the case, it is important that the relationships between teachers at LiU and its partner universities are improved. The personal relations could be tighter and the number of them needs to increase. These relations can be improved by more visits and an increased teacher exchange. Therefore, we once again point out the importance of that LiU encourages teacher exchange e.g. through rewards. This will probably be profitable in a long-term perspective, since it will improve LiU’s relations, its reputation abroad and the quality of its educations.

LiU has a good reputation both in Sweden and abroad. However, LiU’s reputation does not only depend on the quality of its courses and programmes offered. According to the exchange students, their choice to study at LiU was also based on the geographical location, the size of Linköping and the housing guarantee. Nevertheless, their main reason for choosing LiU was the positive comments from former foreign students.
about their stay there. These comments consisted of the good reception that they got and the activities arranged by the International Office. These factors can be seen as strength for LiU and also as a competitive advantage. Furthermore, it is a way of marketing LiU. However, the rest of the marketing that LiU carries through has not the same effect as the marketing just mentioned. LiU’s homepage and the information material are considered to be boring and not very attractive. This is something that needs to be further developed, in order to attract foreign students and improve LiU’s image.

LiU can be seen as a first-mover in several aspects. Some examples of this are that LiU was the first university in Sweden that implemented PBL, was organised in large institutions and had interdisciplinary educations. These factors constituted a competitive advantage for LiU in the beginning, but now several universities in Sweden have copied its structure. However, the Bologna Process gives LiU a perfect opportunity to receive a first-mover advantage. This opportunity concerns the ECTS label. Only two universities in Sweden have applied for this label, and LiU is one of them. If LiU receives this label it can serve as a model for other universities, since the label signals that the university keeps a high quality on its educations. The possession of the ECTS label can therefore constitute an important competitive advantage towards other universities in Europe that have not received it.

Furthermore, LiU can be a first-mover and thereby create a competitive advantage by trying to avoid inertia in its networks through having a well functioning communication. Moreover, it is important that the relationships within the networks contain a high degree of trust. These factors will facilitate LiU’s internationalisation and its possibilities to create a first-mover advantage internationally.

LiU has come a long way in its internationalisation process. Still, it has to constantly develop in order to be recognised as a new thinking, high quality international university on the European market. The Bologna Process offers LiU a great opportunity to be all that. If the university takes advantage of this opportunity by forming a common strategy in alignment with the Bologna Declaration, we think that LiU has great
possibilities to be successful on the international student market in the future.
8. Recommendations

Based on our analysis and conclusion we will in this chapter provide tangible proposals regarding the three research questions. Consequently, the structure of this chapter will follow those questions, which are also illustrated in the middle box in figure 14 and further explained below.

We will start by giving recommendations concerning LiU’s networks and its internationalisation process. Then we continue with issues that LiU needs to think about concerning the relations and how to make them work. Finally, suggestions will be given regarding how LiU can improve and keep its competitive advantage, in the changing environment that the Bologna Declaration implies.

Networks and internationalisation

- Set up a strategy group that works with the implementation of the Bologna Process throughout all the faculties.
- Decide upon the number of partners that is suitable for the university’s international networks.
- Chose international network partners who complement LiU’s educational areas.
- Can LiU really be called an international university? Check if all the faculties and their courses offered have an international touch through the participation of foreign teachers, researchers and students.
Recommendations

- Recruit the best exchange students to the research education to improve LiU’s international character.

Relationships
- Inform all students and teachers concerning the content and implications of the Bologna Process.
- Improve the information to students about the alternatives that exist for studying abroad. Use the people who have been abroad better for this purpose.
- Continue to let the students evaluate their exchange period at the partner university. Take them seriously and follow up why or why not they are satisfied with their stay.
- Continue to take good care of the exchange students who come to LiU.
- Investigate whether or not the existing credit system is correctly distributed concerning the courses given.
- Make the teacher exchange compulsory, by integrating it in the working plan.
- Support teacher exchange through rewarding the teachers who go abroad.
- Utilize the researchers at the university better. Let the students take part of their research e.g. by giving them more lecture hours.
- Employ a person who will handle the co-ordination of foreign teachers and researchers at LiU, in order to increase their participation in the daily education.

Competitive advantage
- Do not sit passive and wait for the directions from the Swedish government. Start discussing, developing and implementing as much as possible. This is important in order to be a modern university that keeps up with the development. Follow the example of the universities in Europe that already have implemented the Bologna Process!
- Create a differentiation focus.
- Implement the ECTS system
- Improve the marketing of LiU, e.g. by making the information material about LiU more attractive.
Recommendations

- Create a database at LiU’s homepage where exchange students can write their reflections of their stay there.
9. Suggestions for further research

We hope that the reader by now has become as interested as we are in the Bologna Process and its implications for LiU. Hence, we will provide some suggestions that could inspire the reader to explore other aspects of this area further. These are topics that we have discovered and discussed during the writing of this thesis.

- The Bologna Process not only emphasises the importance of the education itself, but also national aspects of culture, society, religion, politics, philosophy and economy. Hence it would be interesting to investigate how networks between the Swedish universities could function in order to preserve and strengthen the features of Swedish higher education.
- The influence and effect of Eastern Europe. How will the entrance of these countries in the Bologna Process effect the higher education in Europe?
- The quality assurance of higher education. How can it be obtained?
- The development and use of the teacher exchange as a mean for improving the education, since they are responsible for the substance of the education.
- The operational work at LiU regarding the implementation of the Bologna Process needs further investigation, with the focus on the creation of a strategy group. How should this group be structured? Who should be a part of it? What would be its task?
Suggestions for further research
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## Interviews

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<td>Rydberg, Lars</td>
<td>Planning director at LiU</td>
<td>2003-12-05</td>
</tr>
<tr>
<td>Sandewall, Margareta</td>
<td>Unit director at the International Programme Office in Stockholm</td>
<td>2003-12-06</td>
</tr>
<tr>
<td>10 Exchange students:</td>
<td></td>
<td>November and December 2003</td>
</tr>
</tbody>
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## Other sources

Åman, Per, Lecture in International Business Strategy 2003-10-03, University of Linköping
APPENDIX 1

Intervjuguide

Student-och lärarutbytet vid LiU

1. Varför tror du att antalet inresande studenter har ökat?
2. Varför tror du att antalet utresande studenter har minskat?
3. Hur tror du det kommer att se ut i framtiden?
4. Vad är det som gör att utländska studenter väljer just Linköpings Universitet?
5. Vad görs för att uppmuntra svenska studenter att resa utomlands?
6. Positivt och negativt med ERASMUS-samarbetet?
7. Hur ser lärarutbytena ut i dagsläget? Vad tror du ligger bakom det?
8. Hur tror du de kommer att se ut om några år?
9. Vad kan göras för att öka intresset för utbyte både hos studenter och lärare vid LiU?
10. Hur marknadsför sig LiU nationellt och internationellt?

LiUs samarbetsavtal och relationer

11. Hur många samarbetsavtal har ni med utländskauniversitet/högskolor?
12. Hur ser samarbetsrelationerna ut? (Är vissa starkare än andra?)
13. Vad är bra/dåligt med dem?
14. Vad kan förbättras?
15. Hur ser deltagandet ut de olika parterna emellan? (t.ex. vissa anstränger sig mer än andra)
16. Hur fungerar kommunikationen mellan LiU och partneruniversiteten?
17. Hur ser du på tillförlitligheten mellan LiU och partneruniversiteten?
18. Finns det kulturskillnader som påverkar samarbetena? Hur?
19. Eventuella konflikter som uppstått, vad beror dessa på?
Student- och lärarutbyten nationellt sett

20. Varför tror du att antalet utresande studenter generellt (nationellt) sett har minskat?
21. Varför tror du att antalet inresande studenter generellt (nationellt) sett har ökat?
22. Hur tror du det kommer att se ut i framtiden?
23. Hur ser lärarutbyttena ut i dagsläget? Vad tror du ligger bakom det?
24. Hur tror du de kommer att se ut om några år?
25. Vad kan göras för att öka intresset för utbyte både hos studenter och lärare?
26. Hur ser de svenska universitets marknadsföring mot utländska universitet ut?

LiU och Bolognaprocessen

27. Vad innefattar ditt arbete i relation till Bolognaprocessen?
28. Vad händer vid LiU med anledning av Bologna processen?
29. Hur ser du på implementeringen av Bologna projektet på LiU?
30. Hur långt har LiU kommit i processen jämfört med andra svenska och europeiska universitet?
31. Vad händer vid de andra, framförallt de svenska, universiteten och högskolorna?
32. Skulle man kunna dra nytta av dem som har kommit längre?
33. Vad behöver göras vid LiU?
34. Vilka styrkor/svagheter tycker du att LiU har?
35. Vilka styrkor/svagheter har LiU på den utökade studentmarknaden som Bologna projektet innebär?
36. Vad tycker du kan förändras/förbättras?
37. Hur tror du LiUs position på marknaden kommer att se ut i och med att Bologna projektet innebär ökad konkurrens om studenterna?
38. Hur skulle du vilja att LiUs framtida samarbete utländska universitet ska se ut i framtiden (med tanke på Bologna projektet)?
Bolognaprocessen i övrigt

40. Berätta om ESN-mötet i Växjö den 21-23 november 2003 och vad som framkom där.
41. Berätta om hearingen den 26 november och vad som framkom där.
42. Vad hade LiU att säga där?
43. Vad hade de övriga deltagarna att säga?
44. Vad händer just nu i Sverige angående Bolognaprocessen?
45. Bolognaprocessens påverkan (positiv/negativ) på den högre utbildningen? (t.ex. kvalitet, innehåll)
46. Hur ser du på implementeringen av Bolognaprocessen på de svenska universiteten?
47. Vad är viktigast för universiteten att tänka på inför förändringen?
48. Finns det kulturskillnader som påverkar harmoniseringen? Hur?
49. Hur skulle du vilja att utbytessamarbetena mellan universitet ser ut i framtiden (med tanke på Bologna projektet)?

ECTS

50. Kan du beskriva lite kortfattat vad ECTS-systemet innebär?
51. Hur långt har LiU kommit i implementeringen av ECTS jämfört med andra svenska och utländska universiteter?
52. Hur lång tid tror du att det kommer att ta innan det är genomfört full ut på LiU?
53. Vilka är de eventuella svårigheter som finns vid övergången till ECTS. (Både Sverige och övriga Europa)

Övrigt
Interviewguide

The student- and teacher exchange at LiU

1. Why do you think the number of incoming students has increased?
2. Why do you think the number of outgoing students has decreased?
3. How do you think it will be in the future?
4. What makes the foreign students choose LiU to study abroad?
5. What is positive and negative with the ERASMUS co-operation?
6. What is the situation for the teacher exchange today? Why does it look like that?
7. How do you think it will be in the future?
8. What can be done in order to increase the interest for teachers exchange at LiU?
9. How does LiU market itself nationally and internationally?

The agreements and relations of co-operation at LiU

11. How many co-operation agreements do you have with foreign universities and collages?
12. What is the character of these relations? (e.g. Are some stronger than others?)
13. What is good/not so good with them?
14. What can be improved?
15. What about the participation of the parties? (e.g. some makes more efforts than others)
16. How does the communication function between LiU and the partner universities?
17. What about the trust?
18. Are there any cultural differences that affect the co-operations? How?
19. Are there any conflicts? Why?
Student- och lärarutbyten nationellt sett

20. Why do you think the number of incoming students have increased on a national level?
21. Why do you think the number of outgoing students have decreased on a national level?
22. What is the situation for the teacher exchange today? Why does it look like that?
23. How do you think it will be in the future?
24. What can be done in order to increase the interest for exchange concerning both students and teachers?
25. How do the Swedish universities market themselves towards foreign universities?

LiU and the Bologna Process

26. What is your work in relation to the Bologna Process?
27. What is happening at LiU in relation to the Bologna Process?
28. What is your opinion on the implementation of the Bologna Process at LiU?
29. How far in the process is LiU in comparison to other Swedish and European universities?
30. What is happening at other universities, especially the Swedish ones, in relation to the Bologna Process?
31. Is it possible to benefit from those who have come further in the process?
32. What needs to be done at LiU?
33. What strengths and weaknesses do you think LiU has got?
34. What strengths and weaknesses will LiU have on the extended student market that the Bologna Process implies?
35. What can be changed or improved?
36. What do you think LiU’s position on the market will be in relation to the increased competition about the students that the Bologna Process implies?
37. How would you like LiU’s future co-operations with foreign universities to be (considering the Bologna Process)?
38. Do you consider LiU to be an international university? Motivate.
The Bologna Process in general

39. Tell us about the ESN meeting in Växjö on the 21st–23rd of November 2003 and what was discussed there.
40. Tell us about the hearing on the 26th of November, and the topics discussed there.
41. What did LiU have to say there?
42. What did the other participants have to say?
43. What is happening in Sweden regarding the Bologna Process at the present?
44. What is the effect (positive and negative) of the Bologna Process on the higher education? (e.g. quality, content)
45. What is your opinion on the implementation of the Bologna Process at the Swedish universities?
46. What is most important for the universities to consider when changing?
47. Are there any cultural differences that can effect the harmonisation? How?
48. How would you like the future co-operations between universities to be (considering the Bologna Process)?

ECTS

49. Can you describe what the ECTS system implies?
50. How far in the implementation of the ECTS system is LiU, in comparison to other Swedish and European universities?
51. How long before it is completely implemented at LiU?
52. Are there any difficulties regarding the transition to the ECTS? (Both in Sweden and in Europe)

Other
Interview guide for the exchange students

1. Why have you chosen to study at LiU?
2. What is good with LiU?
3. What is not so good/bad with LiU?
4. Would you recommend others to study here?
## Diploma Supplement

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/Cedefop. The purpose of the supplement is to provide sufficient independent data to improve international transparency and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, content, context and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended.

### 1. Information identifying the holder of the qualification

1.1 Family name  
1.2 Given name  
1.3 Date of birth (day/month/year)  
1.4 Civic registration number

### 2. Information identifying the qualification

2.1 Date of issue  
2.2 Name of qualification and (if applicable) title conferred (in original language)  
2.3 Name of qualification and (if applicable) title conferred in official translation to English  
2.4 Main field(s) of study for the qualification  
2.5 Name (in original language) and status of awarding institution  
2.6 Name (in original language) and status of institution (if different from 2.5) administering studies  
2.7 Language(s) of instruction

### 3. Information on the level of the qualification

3.1 Level of qualification  
3.2 Official length of programme  
3.3 Access requirements

### 4. Information on the contents and results gained

4.1 Mode of study  
4.2 Degree requirements  
4.3 Programme details (e.g., modules or units studied) and individual grades/marks/credits obtained (if this information is available on an official transcript this should be used here)  
4.4 Grading scheme and, if available, grade distribution guidance  
4.5 Overall classification of the qualification (in original language)

### 5. Information on the function of the qualification

5.1 Access to further study  
5.2 Professional status (if applicable)

### 6. Additional information

6.1 Additional information  
6.2 Further information source

### 7. Certification of the supplement

7.1 Date  
7.2 Signature and official stamp or seal (if used)  
7.3 Capacity

### 8. Information on the national higher education system

Source: (www.liu.se 10)
APPENDIX 3

Number of outgoing students 98/99-01/02
(The seven biggest senders)

Antal utresande studenter 98/99 – 01/02
(De sju största sändarna)

Source: www.programkontoret.se 2
APPENDIX 4

Outgoing teachers per seat of learning 2001/2002 (more than ten outgoing teachers)

Utresande lärare per lärosäte 2001/2002 (fler än tio utresande lärare)

Source: www.programkontoret.se 2