

Logistics and Transport Management

Master Thesis No 2002:36

**Different Scenarios for Borås as a Regional
Logistics Center**

Wenjuan Zhou

Graduate Business School
School of Economics and Commercial Law
Göteborg University
ISSN 1403-851X
Printed by Elanders Novum

ABSTRACT

During a long period of time, Borås had a very one-sided business focusing only on the textile and clothing industry. Today Borås has a new look through the process that transformed the city into a new community based on knowledge and service.

Based on this background, the purpose of this thesis is to work out different logistics scenarios as to how Borås, as a regional logistics centre, shall deal with the future opportunities and threats related to the main cargo flow generated by the major companies in this area.

This article first gives an overview about Borås and the scenario method, then analyses the main problem and sub-problems such as features of Borås, globalisation, regionalisation, and major companies' cargo flow. Furthermore a SWOT analysis will be made to figure out the strength, weakness, the possible opportunities and threats of Borås. As a result, different logistics scenarios will be proposed based on these four factors.

A questionnaire, which was sent to 90 companies, will show how cargo flow and logistics activities of the companies look like at Borås currently as well as their requirement in the future. Meanwhile, some interviews were made in order to analyse the information in more detail.

Key-words: regional logistics center, globalisation and regionalisation, cargo flow, SWOT analysis, scenario method.

ACKNOWLEDGEMENTS

This thesis is not only a result of my own efforts, but an outcome of all the enthusiastic people involved in supporting my work.

Hence I would like to thank the **Trade and Industry Department of Borås Municipality** for giving me the opportunity to conduct this project with them. I am also delighted to give my most sincere and deepest recognition and appreciation to Börje Malmstrom, Managing Director; Hans Nyhlén, Business Officer, Åsa Holmstrand and Nelly Hayek in the Trade and Industry Department as well as my tutor Ove Krafft at Göteborg University School of Economics and Commercial Law for their constant help and support during the thesis.

I would also like to express my gratitude to the thirty-six companies that answered my questionnaire, especially the thirteen persons who gave me the opportunities to do the interviews in faces with them. They are Anders Haglund, Logistic Manager of **BrämhultsJos AB**; Gunnar Ryman, Managing Director of **Haléns**; Johan Wikander, Managing Director of **Total Logistik (Sweden) AB**; Johnny Johansson, Managing Director of **Pedab Distribution AB**; Jörgen Willborg, IT/Financial Manager of **Danzas ASG Texport AB**; Lars Sjölund, Head of the Business and Logistics Development of **H&M Rowells AB**; Leif Bjerborn, Distributions Chef/Logistics Manager of **Play Nöjesdistribution**; Leif Johansson, Group Operations Director of **Redcats Nordic**; Per-Erik Nilsson, Regional Manager of **DFDS Transport AB**; Roger Olausson, Material Control Manager/Logistics Manager of **Volvo Bus Corporation, Borås Plant**; Stefan Enander, Logistic Manager of **JC Aktiebolag**; Ulf Zettergren, **Schenker BTL AB**; and Urban Blom, Logistics Manager of **New Wave Group**. I really appreciate their great support.

Wenjuan Zhou

Göteborg, Sweden (December 2002)

Contents

1	INTRODUCTION.....	1
1.1	Background	1
1.2	Purpose	2
2	PROBLEM ANALYSIS	3
2.1	Main Problem	3
2.2	What Does the Regional Logistics Mean in Borås?	3
2.3	Which Factors Contributed to Borås' Success and Will Still Have the Greatest Influence on Its Development in the Future?	3
2.4	Research Structure	4
2.5	Sub-Problems and Information Needed	5
2.6	Delimitation	6
3	METHODOLOGY.....	7
3.1	Literature Study	7
3.2	SWOT Analysis	8
3.3	Data Collection	8
3.3.1	Survey	8
3.3.2	Interview.....	12
3.4	The Critical Discussion about the Thesis	12
3.4.1	Literature Study.....	12
3.4.2	The Survey.....	13
3.4.3	The Interview.....	14
4	THEORETICAL STUDY	15
4.1	The Definition of Logistics	15
4.2	Why Scenarios?	16
4.3	Globalization and Regionalization	17
5	THE FEATURES OF BORÅS	19
5.1	Geography	19

5.2	Tradition	20
5.3	Infrastructure and Multimodal Connections	21
5.3.1	<i>Roads</i>	21
5.3.2	<i>Railways</i>	22
5.3.3	<i>Local Transport</i>	22
5.3.4	<i>Airport</i>	22
5.3.5	<i>Sea</i>	23
5.3.6	<i>IT</i>	23
5.4	Companies in Different Lines of Business	24
5.5	High Quality Logistics Service Providers	25
5.6	Others	26
6	THE BUSINESS AND LOGISTICS ACTIVITIES OF THE COMPANIES IN DIFFERENT INDUSTRIES IN BORÅS.....	27
6.1	Mail Order Companies	28
6.1.1	<i>Analysis</i>	28
6.1.2	<i>Conclusion</i>	29
6.2	Transport and Logistics Companies	31
6.2.1	<i>Analysis</i>	31
6.2.2	<i>Conclusion</i>	33
6.3	Manufacturing Companies	35
6.3.1	<i>Analysis</i>	35
6.3.2	<i>Conclusion</i>	36
6.4	Retail Chains	38
6.4.1	<i>Analysis</i>	38
6.4.2	<i>Conclusion</i>	40
6.5	Trade and Commerce Companies (Import and Export Companies)	42
6.6	Conclusion	43
7	STRENGTH, WEAKNESS, OPPORTUNITY, AND THREAT IN FRONT OF BORÅS	47
7.1	Strengths	48
7.2	Weaknesses	54
7.3	Opportunities	58
7.4	Threats	61

8 THE DIFFERENT SCENARIOS FOR BORÅS AS A REGIONAL LOGISTICS CENTER.....	65
8.1 Scenario of Driving-Force Insufficient (A)	67
8.2 Scenario of Support Insufficient (B)	69
8.3 Scenario of Multi-Developed Regional Center (C)	71
9 CONCLUSION.....	73
REFERENCES.....	77
Books	77
Articles	77
Interviews	79
Internet	80
APPENDIX: LOGISTICS ACTIVITIES QUESTIONNAIRE.....	83

List of Figures

Figure 1: Research Structure and Information Needed	5
Figure 2: Time Zone for Borås Distribution.....	48
Figure 3: Transport Costs of Playstation Software in 2002.....	49
Figure 4: Season Variation of Danzas ASG Texport AB.....	50
Figure 5: Map of Viared	56
Figure 6: The Set of Axes and Variables for Different Logistics Scenarios	66

List of Tables

Table 1: Survey Statistics	11
Table 2: The Member of Board of SMOTA in 2000 and 2002.....	28
Table 3: The Member of SMOTA in 2000 and 2002	29
Table 4: Potential 3PL Services Provided and Used.....	31
Table 5: The Ten 3PL Services Most Commonly Provided and Used.....	32

1 Introduction

1.1 Background

Borås is the second largest city in the western area of Sweden. During a long period of time Borås had a very one-sided business focusing only on the textile and clothing industry. After the crisis in the 1960s, many textile and apparel companies moved their production abroad. The surviving companies' remaining activities in Sweden were management, marketing and logistics.

Today Borås has a new look by the process of transforming from an industrial society into a new town that is based on knowledge and service. There are a variety of companies in several lines of business such as design, production, trade, mail-order, distribution, logistics, transport, third party logistics, IT, retail, communication, e-commerce, music, marketing, advertise, printing, photographers' studios and graphics.

As a result of the goods flow from the mail-order industry to the retail chains and prosperous international trade and commerce activities, Borås has been developed to a regional logistics center. This city at the pivot of West Sweden offers a superior distribution network and a highly developed transportation and communications infrastructure. It is an ideal location for Nordic distribution according to local major companies. Borås' combination of expertise and resources, moreover, has given the city an edge in the intricacies of national distribution, and makes it a necessary part of the Swedish logistics industry and allows it to successfully compete with neighbour cities that are specialised in logistics, such as Göteborg and Jönköping.

As a step in the area's industrial strategic planning, the Trade and Industry Department of Borås Municipality wants a study concerning the main cargo flows generated by its most important companies.

1.2 Purpose

- Figure out different logistics scenarios that Borås will face in the future concerning the main cargo flows generated by its most important companies.
- This thesis will help readers to understand the present situation of Borås and recognize the difficulties we are meeting during the development.

2 Problem Analysis

2.1 Main Problem

Based on the background described above, the main problem for Borås is formulated as:

How shall Borås, as a regional logistics centre, deal with the future opportunities and threats related to the main cargo flow generated by the major companies in this area?

2.2 What Does the Regional Logistics Mean in Borås?

Borås as a regional logistics center is not formed artificially but as a result of history and features in this area. Briefly, Borås became a regional logistics center naturally. In fact, before the term “logistics” prevailed, most companies set up business in Borås because of the local suitable climate for textile industry. As time went by, more and more logistics and transport companies set up in Borås as well because of the huge market demand. Therefore, the commerce and economics are the driving force when Borås becomes a regional logistics center. Without this driving force, the logistics function will fade gradually and Borås will lose its attraction as a regional logistics center.

In the following sections we will investigate the main factors that contribute to Borås’ success and will still have influence in the future.

2.3 Which Factors Contributed to Borås’ Success and Will Still Have The Great Influence on Its Development in the Future?

A lot of factors contribute to the success of Borås, the main of which are an ideal geography location; a very developed transportation infrastructure system in the region; a good connection of highways, railways and airports, which reduces distances within Sweden and with the rest of the world; a prosperous industrial and economical life; a highly trained workforce and many incentives for companies to locate their headquarters and business activities in this important economic center.

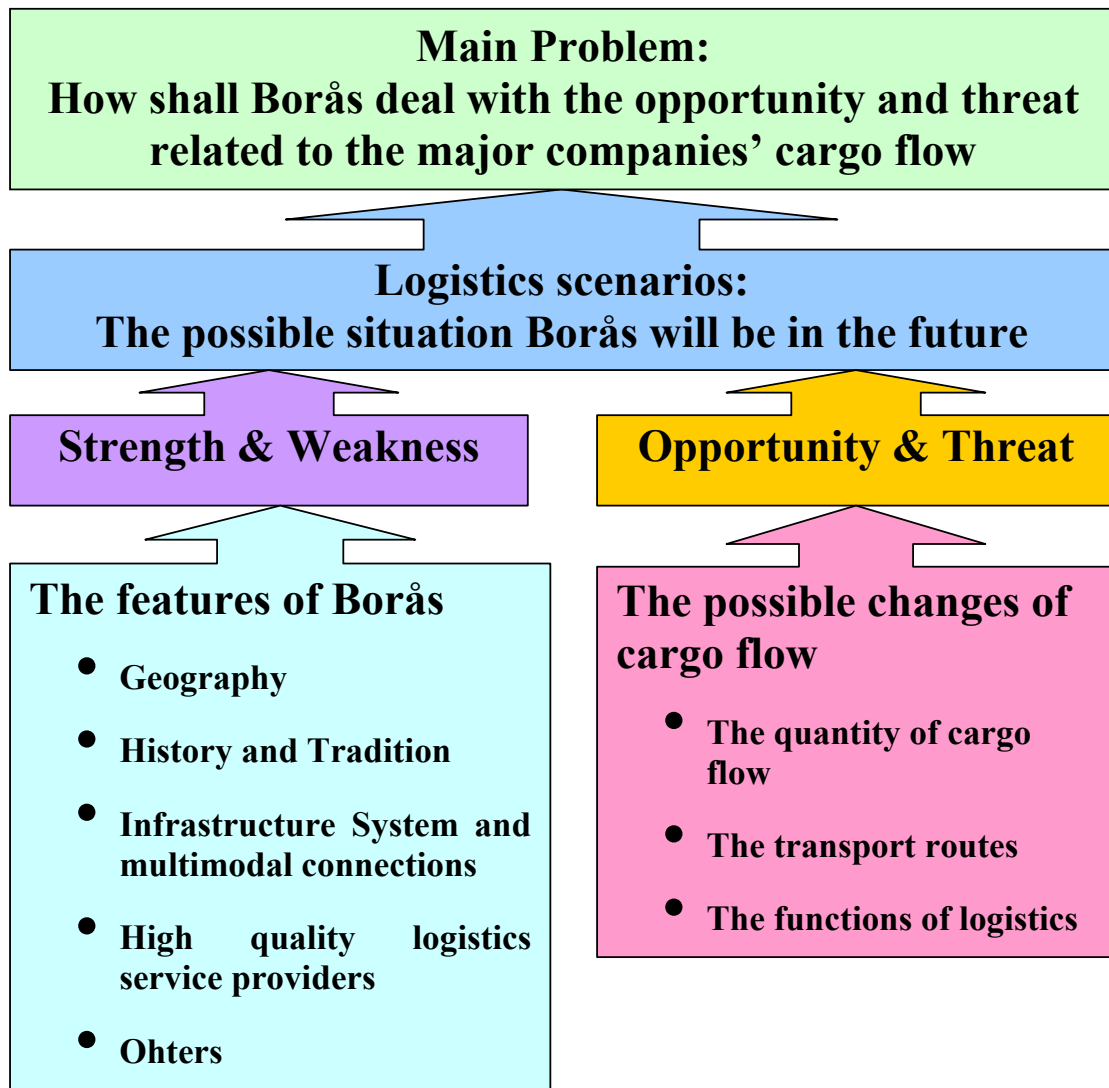
At the same time, the external trend such as globalisation and regionalisation will have influence on the area. Ultimately, this kind of effect will be reflected by the business activities of companies. Therefore, the different logistics situations of Borås in the future are mainly decided by the existing companies' business activities and their development in the future.

2.4 Research Structure

Before we solve the main problem and make strategic suggestions, we should use different logistics scenarios to highlight the possible situations Borås will be in the future concerning its strength, weakness, opportunity and threat. Therefore, SWOT analysis will be conducted in order to specify those four factors. Consequently, the sub-problems are made. In Chapter 4 we will explain why the scenario method is used in this thesis.

In figure 1, the research structure is presented. The information needed is specified as well concerning the different industries such as mail order companies, logistics and transport companies, manufacturing companies, trade and commerce companies, and retail chains in Borås.

Figure 1: Research Structure and Information Needed



2.5 Sub-Problems and Information Needed

According to the analysis above, several sub-problems are specified. Then an amount of information has to be collected in order to solve those sub-problems.

- **What are the strengths and weaknesses of Borås in the competition?**
 - What are Borås' advantages?
 - What does Borås do badly?

- **What are the possible opportunities and threats that Borås will face in the future?**

- What can Borås benefit from the changes internally and externally?
- What may cause the companies to increase/decrease their business and logistics activities in Borås?

- **What features does Borås have?**

- Geography
- History and tradition
- Infrastructure and multimodal connections
- High quality logistics service providers

- **What are the possible changes of cargo flow?**

We need to specify three aspects that will reflect the changes of cargo flow.

- The quantity of cargo flow
- The transportation routes
- The functions or the services required

Consequently, we will investigate which factors will contribute to the different aspects of cargo flow. The quantity of cargo flow is mainly affected by the market demand from inside and outside of Sweden. The main factors that can influence the transportation routes are suppliers and market location. Finally, the main factors that will affect the logistics functions of a company are, externally, the market and industrial trend, and internally, the logistics cost control, the requirement to improve logistics operation efficiency, and a company's strategy.

2.6 Delimitation

In this thesis, we will not handle and discuss the following areas separately:

- The passenger transportation
- The companies outside Borås
- The government (however included in infrastructure development)

3 Methodology

3.1 Literature Study¹

To date, there has been a limited amount of empirical research on logistics scenarios from a city's point of view, perhaps because the factors that contribute to the logistics center are too many to include.

Actually, the trade and transport flow through the region are the most significant factors in the region's logistics activities. A proceedings report is based on contributions to the workshop "Trade and Transport Flows in the Baltic Sea Region" that took place in Copenhagen in 2000. That report includes five independent articles concerning different topics such as the development scenarios for the Core Baltic Sea Region, Sweden's export & import in the Baltic Sea Region, the trend in trade and transportation between Lithuania and Sweden, etc. In those articles, the theory of scenario and globalization is discussed. Furthermore, the discussion of the regional trade and transport shows us a good direction on how to investigate the trend of trade and its influence on the transportation in Borås.

There are many articles about a company's regional logistics center. Those articles are for example: *New Takes on Transportation* by Jules Abend, *Moving to Speed Dial* by David Maloney, *Making the Right Connections*, *Warehouse of the Year 2001: Automation Nation* by John R Johnson, and *Pfizers Prescription for Fulfilment* by Jim Thomas. They describe how the American global leading companies' logistics centers work regionally or nationally. Those companies are from different industries such as textile & apparel industries, communications industry, transportation industry, retailing industry, pharmaceutical industry, etc. All those articles gave us a lot of ideas about logistics center and logistics activities of various industries.

On the other hand, there are some articles analysing the country or continent as a logistics center in a wider scope. They are e.g. *France – a Growing Logistics Center* by Anthony Coia, *The Rhine – Ruhr Port of Duisburg* and *Logisticians without Borders* by Anthony Coia, *Gov't Aims to Streamline Logistics, Nation*

¹ Concerning all the articles mentioned in this section, please see reference list.

Tackles logistics inefficiency, Material Management System Cuts the Wires, Synnex Takes Another Step onto the Mainland – big Taiwan Distributor to Set Up Logistics, Warehousing Center in China by Faith Hung, *Where Manufacturing Thrives* by John S McClenahan, and *Asia's Economic Rebound Signals Change in Logistics Strategies*. These articles analyse the most important factors of different countries as a logistics center in Europe or Asia, which gave us so many good ideas that, to some extent, we can compare the city logistics center with country logistics center.

Third-party logistics also plays a very important role in the modern logistics and transportation industry. One article called *Third – Party Logistics: Some User Versus Provider Perspectives* by Paul R. Murphy and Richard F. Poist makes a very empirical and interesting research on the relationship between 3PL services providers and users. A table from that article is also quoted in the survey for this thesis.

3.2 SWOT Analysis

SWOT analysis is a tool for auditing an organization and its environment. It is the first stage of planning and helps strategy makers to focus on key issues. SWOT stands for strengths, weaknesses, opportunities, and threats. Strengths and weaknesses are internal factors. Opportunities and threats are external factors

In this thesis, before we solve the main problem, SWOT analysis as a methodology is used to find out the sub-problems and consequently the information needed.

3.3 Data Collection

3.3.1 Survey

One of the ways to collect primary data is a descriptive survey concerning the companies' business and logistics activities in Borås.

A uniformed questionnaire was sent to ninety companies in Borås. I had planned to send two different kinds of questionnaires to logistics services

providers and users respectively at first. But such research is extremely difficult to conduct. Furthermore, a lot of work has to be done to identify those two groups with a lot of criteria but the time for this thesis is limited. On the other hand, sometimes one company can be both a logistics services provider and a user.

Each target company has received a mail that consisted of a cover letter in Swedish from Börje Malmstrom, a copy of the questionnaire, and a postage-paid return envelope.

The thirty-six usable received responses represent a response rate of 40%. Among them, thirteen companies are from manufacturing industry, three from mail-order industry, four from retailing industry, ten from logistics and transportation industry, three from international trade (import & export) industry and three from other kinds of industries. Furthermore, most of them indicate that their revenues will continue to increase, and most of them believe their revenue growth rate will be at least from five percent to ten percent annually within the next several years. There are five companies reporting the growth rate will go beyond ten percent annually. Most of them are logistics and transport companies.

Among the responses received, most companies' business scopes are international, mostly in Europe and Baltic region, and some companies' business expands to USA and Far East and Asia Pacific. Out of those thirty-six companies, thirty-three transport cargo flow by road, thirteen by sea, five by air and only two companies by train. More than half of the companies transport cargo flow only by road.

Concerning the reason for the companies to settle their headquarters and logistics business in Borås, most of them said it was because of the history reason: the companies were established even before "Logistics" was valued. Fourteen companies said it was because of the ideal geography location of Borås. Another important reason is high quality logistics services locally.

On the contrary, when asked what inconvenience for the logistics activities there is, most companies thought there was no inconvenience. But still several companies said the infrastructure system and logistics facilities in Borås were unsatisfactory. These complaints came mostly from the manufacturing, mail order, logistics and transport industries. Furthermore, there was some complaints about the geography location, multimodal connections, and government policy of Borås from a few manufacturing companies.

As to the current logistics services usage, among the 16 answered companies, the vast majority spent below three percent or less of their corporate sales turnover on such services. More than half of the respondents said their logistics cost was low and near one fourth said it was high. Most of these companies thought they operated the logistics activities efficiently or very efficiently, and were satisfied with their current logistics performance. Approximately seventy-two percent of the companies anticipate increasing expenditures for the logistics activities. These companies will be dedicated to improving the logistics operational efficiency in the future mainly through new computer system and advanced logistics operation system, outsourcing, supply chain improvement, better planned distribution, cheaper transport, and other ways of cutting cost. A detailed table from the survey is presented below:

Table 1: Survey Statistics

		Manufa- -cturers	Mail Order	Reta- ilers	Logistics & Transport	Others	Totally
Number of Companies		13	3	4	10	6	36
Business Scope	National			2	6	3	11
	International	13	3	2	4	3	25
Transport Modal	Road	13	1	3	10	6	33
	Train	1			1		2
	Sea	3	2	2	4	2	13
	Air		1	1	2	1	5
Why Borås	History	8	3	2	8	4	25
	Geography	4			7	3	14
	Infrastructure	2	1		1		4
	Multimodal Collections		1				1
	Logistics Facilities	1	1	1			3
	Logistics Services	2	1	1		1	5
	Investment Environment	1		1	1	1	4
	Government Policy				1	1	2
Inconven- ience for Logistics Performance	Geography	2					2
	Infrastructure		1		1		2
	Logistics Facilities	2			1		3
	Multimodal Connections	1					1
	Government Policy	1					1
Headquarter In Boras	Yes	9	2	3	7	6	27
	No	4	1	1	3		9
Logistics Cost	Very Low or Low	7	1	2	4	4	18
	High or Very High	5	2		1	1	9
Logistics Operation	Very Efficient or Efficient	11	3	3	6	6	29
	Inefficient	2					2
Logistics Performance	Satisfied	11	3	3	7	5	29
	Dissatisfied	1		1	1		3
Improvement	Yes	11	3	2	6	4	26
Move out of Borås	Yes						
	No	10	2	4	8	6	30
Business Growth Rate	< 5%	1	1			1	3
	5% < 10%	9	2	1	1	2	15
	10% <				4	1	5
Desire for the Future	Logistics Center	5		2	9	4	20
	Commercial & Trade Center	10	1	3	7	3	24
	Others	2	1				3

3.3.2 Interview

In order to get primary data about the business and logistics industries in Borås in more detail, interviews with several local major companies were conducted.

At the beginning, only eight companies were chosen by Hans Nyhlén for the interviews. After we collected the entire answered questionnaires, a lot of interesting comments appeared. Therefore, a decision was made that it was necessary to make more interviews in order to know more companies' opinions. As a result, another six companies were chosen for the interviews. All of them are big companies representing different kinds of industry and products. These fourteen companies are *BrämhultsJos AB, Haléns, Total Logistik (Sweden) AB, Pedab Distribution AB, Danzas ASG Texport AB, H&M Rowells AB, Play Nöjesdistribution, Redcats Nordic, DFDS Transport AB, Volvo Bus Corporation, Borås Plant, JC Aktiebolag, Schenker BTL AB, Salomon Sport AB and New Wave Group.*

However, *Salomon Sport AB* was not available during that time. The logistics manager of *BrämhultsJos AB* answered the questions in the interview by email. The other twelve companies were visited from 12th, November to 20th, December 2002.

3.4 The Critical Discussion about the Thesis

In this section, the validity and reliability of three methods used in this thesis are discussed.

3.4.1 Literature study

The book called *Trade and transport flow in the Baltic Sea Region* gives us a full trade and transport background and environment about Sweden. How Sweden, as a very important part in Scandinavia and Baltic region, participates in trade and transportation is discussed in that book. Consequently the external environment for Borås can be deduced from it.

Most of the articles used in this thesis were written by well-known authors and we tried to use as new articles as possible. Those articles are about the logistics center of a whole country such as France, Netherlands, Singapore and Korea; or

the logistics center of a company in some area, such as the national logistics center of Verizon Logistics' Westfield Ind., alliance logistics center of JCPenney, etc; or the logistics center of a harbor such as the Rhine-Ruhr port of Duisburg, Germany. One problem was that very little was written about the city logistics center especially when it is from the point of the government. However, when comparing the city with a whole country, we can find a lot of things in common. That is why we decided to use these articles to support our ideas about the logistics center.

The structure of analysis and discussion about 3PL in this thesis is inspired by an article written by P.R. Murphy and R.F. Poist. They are both well-known professors in business logistics and transportation fields. Although more definitive conclusions will require additional research, it appears that the contract logistics is a dominant trend that will demand more of the management's attention.

3.4.2 The Survey

There are three broad sources of errors when undertaking a survey: sample error, frame error and dropout error.

The target companies are made of three groups, which include the companies with major cargo flow in Borås, all local logistics and transport companies, and 5 percent of the companies in other industries in Borås. This combination covers all the scope under research. Hans Nyhlén, who is familiar with the current companies in Borås, did the list of the target companies. Therefore, the issue of sample error does not exist in this survey.

The frame error refers to biases of the result that depends on a mismatch between the frame of sample and the target population. A frame error can for instance arise when the telephone directory is used as register of the population. The problem with a telephone directory as a register population is that not all people have a phone. Since Trade and Industry Department of Borås Municipality sent out our questionnaires to the contacted person in each company, the risk of a frame error is thus avoided.

The third source of error, dropout error, is more relevant in our survey. Dropout means a failure in getting all data that is needed for the survey. It is very important that the person that should answer the questionnaire really has the knowledge. The questionnaire was sent to the managing directors or logistics managers who have the most knowledge of the business and logistics activities taking place in his company no matter concerning business operation or strategies. They were all very experienced and knew every aspect of the business clearly. To control the information, we have questions about name and title of the respondents in the questionnaire.

Most of the major companies in Borås answered the questionnaire. However there were some problems in getting back all the copies of the questionnaires. For example, **Ericsson Microwave AB** is the most important IT company in Borås but we could not do any research on it because the company had recently adopted the principle not to answer any questionnaire. Neither could they do an interview as they will not handle the flow of cargo themselves any longer from the middle of October 2002. Instead, a forwarding agency will do this for it.

3.4.3 The Interview

All of the interviewed companies are the major companies representing different kinds of industries and products. They are all very co-operative in the interview and survey, which makes the thesis easier to conduct. Besides, more useful and interesting information were found in the interview, which gave a strong support to my analysis in this thesis from a real business aspect.

4 Theoretical Study²

4.1 The Definition of Logistics

There are different kinds of definitions of Logistics from different points of view.

‘Logistics’ was originally a military term used to describe the organisation of moving, lodging and supplying troops and equipment. It was clearly somewhat broader in scope than transport, since it covered everything needed to deliver troops and equipment to the right place, at the right time, and in the right condition.

Modern business logistics is based on much the same concept. It sets out to deliver exactly what the customer wants – at the right time, in the right place and at the right price. Very often transport is a major component of the ‘supply-chain’ which delivers to the customer the goods and services needed. ‘Logistics’ is the process of designing, managing and improving such supply-chains. It can include procurement, manufacture, distribution, and waste disposal, together with associated transport, storage and information technology.

The Council of Logistics Management has adopted this definition of logistics:

Logistics is that part of the supply chain process that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements.

This definition most likely concerns the logistics we discuss in this thesis. From this point of view, this thesis is more concerned about the cargo flow of major companies in Borås and the prospective of logistics industry in Borås in the future.

² Concerning all the authors mentioned in this chapter, please see B. Johansson and D. Nilsson (Eds.) (2000).

4.2 Why Scenarios?

In today's globalising environment, regions face overwhelming structural change and uncertainty, in which many decisions may cause long-ranging consequences and risks. Anticipating the future in a rapidly changing environment calls for systematic future-oriented analysis and creativity, insight and intuition. Scenario thinking is one possibility to combine these elements into vigorous strategies. In future-oriented strategic planning, when making sense of complex events, presenting alternative images for the future instead of extrapolating current trends from the present is very important. Scenario planning is one of the means to open up policy-makers' thinking to see strategic options from a broader point of view (Raagmaa and Sotarauta 1997).

Scenarios can be categorised into two major groups: exploratory scenarios that start from the past and present trends and lead to likely futures, and anticipatory or normative scenarios that are built on the basis of alternative visions of the future (Godet 1997). In this paper, we utilise exploratory scenarios.

Scenario planning is not to plan procedures but tools in bringing about strategic consciousness (Raagmaa and Terk 2000). Good scenarios are plausible and surprising, and powerful enough to break old stereotypes. As Schwarz (1997) points out, after writing scenarios one should keep in mind that scenarios do not predict the future, and that tales must be told again and again. Using scenarios is researching the future, by recognising the warning signs and the drama that is unfolding one can avoid surprises, adapt and act effectively. This illustrates that the purpose of scenarios is not be implemented as plans, but the purpose is to prepare for what is thought to happen, how to make sound strategic decisions, and how to use them as parts of the communicative process. Ultimately, the end result of scenario-planning is not a more accurate picture of tomorrow but better decisions about the future (Schwarz 1997).

As van der Hejden (1997) states, this kind of communication incorporates the knowledge and intuition of the external environment as well as the internal vision, culture, and competencies of the organisation itself. The scenarios planning provide actors with opportunities to discuss strategic issues, their own intention, and possible futures.

Scenarios encourage better thinking and learning, thereby enabling decision-makers to assess and reassess their strategic options, and act with confidence amidst great uncertainty. In this process scenarios aim to change mental models of policy-makers, show them the need to understand predictability and uncertainty, and re-frame strategic issues involved by introducing new perspectives (Sotarauta 1995, 1997).

4.3 Globalization and Regionalization

In researching, planning and forecasting development on a regional level, changes occurring throughout the world must be considered first. The entire composition of a society's inner structure is changing, and the regions and even small localities may integrate into the global system. This process has also been called "globalisation" (Swungendow 1992).

One of the most influential results of the development of technology and market forces has been the globalisation of the world economy. A common global marketplace of raw materials, labour, capital and products has developed. The mobility and transport opportunities of capital and technology are so great that each individual component of the production cycle can be placed wherever in the world the combination of production factors ensures the lowest cost price. This development will open many new opportunities. On the other hand, the mobility of capital, people and production factors will cause a stability problem for countries and regions, since capital can easily flow out of them if the situation changes (Raagmaa and Terk 2000).

In developed countries, the good and stable development opportunities will be enjoyed only by regions in which the education level, the qualifications of labour, constant training and research and development activity – i.e., innovation – ensure the rapid adjustment of production factors to the changing demand of the market (Raagmaa and Terk 2000).

Therefore, in this article, firstly we will illustrate why Borås is able to be a regional logistics center and find out the factors that will still work.

5 The features of Borås

A closer look at the features makes it clear why Borås is a good choice for various companies when it comes to locating business and logistics operations.

5.1 Geography

Geography plays an important role in Borås' favour. It is the second largest city in West Sweden. The area is at the heart of the western Sweden region, with one and a half million people living in a 100-kilometre radius of the city. Its centralized location provides access to major markets throughout Sweden and reduces the distance with rest of the world.

Turnover of Municipality of Borås in 2001 was 4,001 billions (including municipality owned companies) or 4.8 billions (excluding the companies). The city is divided into 7 communities. Borås' population of approximately 100,000 ranks 13 in Sweden. Sixty three percent of the population are aged from 16 to 64. Borås has a labour force of about 45,000. Industry and the public sector account for one third each, commerce and the private service sector for the remainder. The unemployment rate was 4.1 percent in February 2002.

5.2 Tradition

Borås is not Sweden's oldest city, but it has a vivid and unique history. It is mostly because of a tradition in textiles that developed early on from the middle of the 17th century and became a cultural heritage. At the end of the 19th century the industry began to increase strongly and a number of shipping mills, textile mills and dye-works burgeoned in this area.

Trade and commerce were conducted from the rural areas surrounding Borås from house-to-house peddling in the past, grew and gradually became completely dominant. In the middle of the 17th century Merchandising had found its Mecca in the district that a few hundred years later came to be called Sjuhäradsbygden (Seven Administrative Country Districts). The seven administrative districts are Veden, Ås, Mark, Kind, Redväg, Bollebygd and Gäsene.

Mail order trade is today's equivalent of the house-to-house peddling of the past. At the beginning of the 1950s there were over 100 mail order companies in Borås alone. Today Borås is the mail-order center of Scandinavia.

Borås is still something of a Mecca for domestic textiles and ready-made clothing, and higher education and training in these fields take place in Borås.

The prosperous mail order industry and the vigorous commerce brought up an international attractive shopping center called Knalleland. It provides accessibility, enjoyment, fashion and traditions for people who want to shop sensibly and experience the sensational atmosphere in Borås. The shopping center has 2,500 parking spots and attracts 5 million visitors every year. Today 80 shops in an area of 140,000 m² offer an exciting blend of trends and tradition. The total turnover in 2000 was SEK 1.4 billion. Knalleland's success has really put Borås on the map and proven that tourism and commerce go hand in hand as well.

5.3 Infrastructure and Multimodal Connections

Borås is at the intersection of four major national highways and can be reached by rail from four directions. Landvetter International Airport - Scandinavia's largest air cargo center – is located halfway between Borås and Göteborg. The major import/export facilities are located in the docks in Göteborg and Varberg, which can be reached by train and highway from Borås within 45 minutes. The city makes a good use of intermodal connections. Whether shipping by road, rail, air or sea, logistics managers will find practical systems that make it easy to expedite the transfer of cargo between different modes and maximize distribution efficiency.

5.3.1 Roads

The high way between Göteborg and Borås is in a very good condition. Stockholm, Oslo, and Copenhagen can be reached from Borås within 6 hours. Most Swedish cities, Demark, Finland, Baltic countries, even Germany and France can be connected to Borås directly.

Highway transportation is a very important component of the infrastructure system in Borås. Borås is a junction of road communications in Western Sweden, an area where routes RV40, 27, 41 and 42 and LV180 intersect.

Now there are two routes to transport cargo flow by road between Göteborg and Stockholm. One route is Göteborg – Borås – Jönköping – Stockholm, and the other is Göteborg – Skövde – Stockholm. Concerning the first route, the highway from Göteborg to Borås and from Jönköping to Stockholm is good, but the road between Borås and Jönköping is not: too narrow, too much congestion, and several traffic accidents per year. However, the other route is much worse than this one. The main road 40 is the motorway between Borås and Göteborg. Plans are underway to transform the remainder of this highway into motorway between Borås and Jönköping. Once completed, this will mean that the road between Göteborg and Stockholm via Borås will be of motorway-standard from start to end.

There is a plan to build a new southern bypass for main road 27, where the road joins the RV41 and RV40 to Alingsås and Vänersborg/Trollhättan. This will give Borås a strategic position between the E4, RV40 and the E20.

The main road 27 is also a link in E77, which in turn is a part of the TEM (Trans European Motorway) from Oslo to Athens. There is a plan to construct a new stretch of main road 42 right past the Nordskogen Industrial Estate in Borås.

5.3.2 Railways

All lines in the area are being modernised and upgraded. The rail company Västtåg operates a service that integrates regional rail travel with long-distance rail travel. There is also a commuter train service between Borås and Göteborg, which takes only 55 minutes. The high-speed train X2000 provides a direct, daily service between Borås and Stockholm.

Concerning the freight transport between Göteborg and Stockholm through Borås, there is no terminal to handle cargo transportation in Borås. The project of Götalandsbanan line is under construction, which is a part of the European corridor project and is a high-speed train between Göteborg and Stockholm via Landvetter International Airport, Borås, and Jönköping.

The railway is a good alternative to road transport no matter concerning the environment or the traffic congestion caused by truck.

5.3.3 Local Transport

City bus services, regional transport and long-distance services are all excellent. There is a plan to establish a travel center, next to the central railway station in Borås. The travel center will become a valuable hub that will provide a modern interface for city and regional bus services, rail services, airport buses, taxis, private motorists, pedestrians and cyclists.

5.3.4 Airport

Landvetter International Airport is just 40 kilometres (30 minutes) away from central Borås. With all of its non-stop and direct seventy-five daily flights to

some 25 worldwide destinations, Landvetter is Sweden's second largest airport and is a propellant in the development of the economic corridor between Borås and Göteborg. Of the five motorway links starting from Göteborg, this communication link has the greatest development potential for business and housing.

5.3.5 *Sea*

Deep-sea ports are the gateways of international trade, and Borås is very near to two well-managed seaports: Göteborg port and Varberg port.

On the west-coast of Sweden, Göteborg port is situated just 45 minutes from Borås and has the capacity to handle the largest container vessels in Sweden. It is also the largest Swedish port for container traffic, handling nearly 685 thousand containers TEU (twenty foot equivalent units) and 33 million tons of freight in 2000. It now has two new Ro/Ro-sites and 87,000 square meters of new terminal space. Göteborg port 2000 development project is a SEK 1.1 billion agreement signed with the National Maritime Administration to widen, deepen and straighten the channels into Göteborg. In addition, Göteborg port will invest up to SEK 400 million related for necessary reinforcements of existing quay plants

5.3.6 *IT*

Increasingly, the economic competitiveness and export production of countries and regions will depend on the accessibility of global market information and advertising. The presence of modern communication facilities will become an inevitable prerequisite for attracting international investments, and information technology (IT) will become an inevitable component of production and services technologies (Raagmaa and Terk 2000)³.

Borås holds a front position in the field of IT thanks to the collaboration between the local authorities, the University, business and industry and other organisations and authorities, which creates a local network and benefits from the Internet.

³ Please see B. Johansson and D. Nilsson (Eds.) (2000).

5.4 Companies in Different Lines of Business

Borås has a well-developed spirit of enterprise. This is why 500 new companies start every year, among which the big companies are for example **ENS, ICA-Bank, Transcom** and **Hööks**.

There are totally 8,800 companies with 46,000 work places, but only 200 companies have more than 25 employees.

Major mail-order companies such as **Redcats Nordic, H&M Rowells** and **Haléns** are names known not only throughout Sweden but also internationally.

The city also houses the head offices of a number of retail chains such as **MQ** and **Hemtex**. It is also the Swedish center for textile production, distribution and ready-to-wear clothing, represented by such famous names as **Borås Wäfveri, Almedahls, Oscar Jacobson** and **Fristads**.

Other famous manufacturers and IT companies are for example **Volvo Bus Corporation, Ericsson Microwave Systems, Parker Hannifin, Beve Electronics** and **Uponor**.

Borås is traditionally a trade and commercial center. It enjoys an extensive foreign trade through 1,500 import and export companies.

The vigorous commercial activity also includes many well-established marketing companies and, as a natural extension, advertising agencies, photographers' studios and printing plants. Borås hotels range from international first class to economic class.

In 1999, the total labour force in Borås was 46,566. There were 10,984 employees in the trade, communication and transport industries in Borås, accounting to 23.6 percent of the total employees in the area. This figure is higher than the average level in Sweden, 18.4 percent. The employees in manufacturing and mining industries were 18.6 percent of the total employees, which is to be compared with 19.2 percent in whole of Sweden.

5.5 High Quality Logistics Service Providers

The high quality logistics service is one of the most important components forming the effective and efficient cargo transportation. The experts that exist in e-commerce, logistics and distribution businesses constitute the foundation for Borås to develop into a logistics and distribution center in Scandinavian.

There are different types of logistics companies in Borås, from the large, multifaceted third-party logistics service providers (3PLs) to smaller companies that may specialize in a particular function or commodity. These companies are for example **Total Logistics Sweden AB, Danzas ASG Texport AB, Maersk Logistics AB, Privpak AB, Schenker - BTL AB, ENS, Pedab Distribution AB, DFDS Transport AB**, etc.

5.6 Others

The establishment of the University and relocation of Swedish National Testing and Research Institute (SP) from Stockholm to Borås made the transformation to a new reality easier.

There are nearly 9,000 students in the University of Borås. The University provides education and research in Textiles and Fashion, Engineering, Business, IT, Health Sciences, etc. The Swedish Testing and Research Institute (SP) is a major resource for research, analysis, testing and inspection. The college, SP, the Foundation Institute for Corporate Development (SIFU) and Swedac, contribute to a high level of expertise in many areas of Borås' business life.

Borås is a member of "West Sweden", which is an organisation of sixty-eight municipalities in west Sweden and has offices in Gothenburg and Brussels. It provides information and education about EU programmes and funds, and covers West Sweden's interests within the European Union.

6 The Business and Logistics Activities of the Companies in Different Industries in Borås

This section aims to investigate the current business and logistics activities of the companies in different industries in Borås. The possible trend of their business and logistics activities will be discussed as well.

At the end of each sub-section, a short conclusion is made for each industry. The sub-problems will be discussed according to the information collected in order to solve these problems, which are presented below.

The possible change of cargo flow is caused by:

- The quantity of the cargo flow
 - o Demand of inside market
 - o Demand of outside market
- The transportation route
 - o Suppliers
 - o Geography location of the market
 - o The choice of different transport modal
- The function or the service required
 - External:
 - o Market & industrial trend
 - Internal:
 - o Logistics cost control
 - o The requirement to improve logistics operation efficiency
 - o Company's strategy

The research is dependent on the literature study, companies' websites, received surveys, and interviews with the major companies in Borås.

6.1 Mail Order Companies

6.1.1 Analysis

Mail order industry has been growing with the development of municipality of Borås and continues to play a significant role in Borås' economy.

SMOTA (Swedish Mail Order and Traders' Association) is an active member of EMOTA (European Mail Order and Traders' Association) located in Brussels, Belgium. SMOTA was established in 1973, which organizes the leading mail order companies in Sweden. Most companies are business-to-customer but business-to-business is increasing. The Swedish mail order companies are also the dominating actors in Scandinavian market. The top 12 list of Scandinavia include 9 Swedish and 3 Finnish companies.

The board of SMOTA includes 12 persons with Mr Gunnar Ryman as chairman, who is from Haléns, Borås. There are three newsletters per year distributed under the name *Postorder*. According to the up to date newsletters, the members of the board of SMOTA are from ten different leading mail order companies all of the Sweden. Seven of them are from Borås in 2002. In 2000, out of eleven mail order companies in the board of SMOTA, six were from Borås. Detailed information is shown in Table 2.

Table 2: The Member of Board of SMOTA in 2000 and 2002

The number of board members (people)	The number in 2002	The number in 2000
Totally	12	12
From SMOTA	1	1
From Borås	7	6
From Stockholm	0	1
From Malmö	0	0
From other cities	4	4

The number of the members of SMOTA increases from 39 in the year of 2000 to 43 in 2002. The interesting information is presented in Table 3.

Table 3: The Member of SMOTA in 2000 and 2002

The number of members	The number in 2002	The number in 2000
Totally	43	39
From Borås	17	15
From Malmö	8	4
From Stockholm	2	3
From Göteborg	1	1
How much does Borås account for?	39.5%	38.4%

From the Table 2 and Table 3 we can find that Borås plays a leading role in the mail order industry in Sweden. From the year of 2000 to 2002, the board members from Borås increased from six to seven. The number of members from Borås in the association added 2 from 15 to 17. Although the number of members from Malmö saw a double from 4 to 8, there is no place for them in the board. Therefore, no matter the total number or the business scale of the mail order companies, Borås flies far beyond other cities and is certainly the center of mail order industry in Sweden. Furthermore, it shows an increasing leading position of Borås in the mail order industry in Sweden and Scandinavia.

6.1.2 Conclusion

Three main mail-order companies in Borås responded the questionnaire and all of them accepted the interview. Through the research, the basic and preliminary information about the mail-order industry is presented in front of us.

- The quantity of the cargo flow

Mail-order industry is the flag industry in Borås mainly because of the history and tradition. Till today, Borås has been the Mecca for textile industry and mail-order industry in Sweden. The commercial investment environment, the advantages of mail-order business and the modern style of purchasing and expenditure make mail-order industry more and more dynamic in Borås.

Most of these mail-order companies reported that their annual business growth rate would be less than 5% in the next few years. It means the potential quantity of the cargo flow will keep increasing in Borås.

- The transportation route

These mail-order companies in Borås have their business internationally, mainly in Europe. These companies transport their cargo flow mainly by sea and road. They also use air transport in urgent cases. The road transport is therefore very important for these companies.

However, it seems that the road transport is not satisfactory because one mail-order company said the infrastructure system in Borås was not convenient. There was the same complaint from other industries as well.

- The logistics function or the service required

Most of these mail-order companies have their logistics/distribution center in Borås, which means complicated logistics functions are performed in this area, such as consolidation, coordination, sorting, kitting, sequencing, commercialisation, storing, cross-docking, and etc.

All companies deemed their logistics operations were efficient and were satisfied with their current logistics activities in Borås. But still some said their logistics cost was high. All of the companies will improve the logistics efficiency and control logistics cost by better warehouse planning system and order optimising system, as well as organizational internal improvement. Currently, these companies would not like to outsource logistics business to 3PL providers because of the characteristics of mail-order industry. Their logistics activities are quite integrated; therefore it is very hard to separate logistics activities and make outsourcing. The most commonly outsourced logistics service is warehousing.

Another potential problem for these mail-order companies is that it is hard to find qualified staff, especially managers, for the companies.

6.2 Transport and Logistics Companies

6.2.1 Analysis

Two tables were included in the survey sent to every target company, respectively for 3PL services providers and users. Finally seven out of ten 3PL services providers and sixteen out of twenty-six 3PL services users answered the tables. The result is shown in Table 4.

Table 4: Potential 3PL Services Provided and Used

Potential Third-Party Logistics Services	3PL Services Providers		Current and Potential 3PL Services Users		
	Provide currently	Provide in the future	Self - provide	Outsource	Desire to Outsource
Assembly, repair, and packaging	5	5	7	4	1
<i>Bonded warehousing</i>	4	5	3	1	
Consulting services	4	4	1	2	
Customs clearance	5	6	7	6	
Development of distribution strategy/system	4	5	6	2	
<i>EDI capability</i>	7	7	8	1	
Expedited delivery	3	3	5	2	
<i>Export operations</i>	5	6	11	1	
<i>Export licensing assistance</i>	4	5	4		
Freight bill payment	2	2	10	1	
<i>Freight charge auditing</i>	3	3	6		
Freight consolidation	4	4	2	3	
<i>Freight rate negotiations</i>	6	6	10	2	1
Import operations	4	5	9	4	
Information management	4	4	5	1	
International telecommunications	1	1	6	1	1
Inventory management	5	5	7	3	
Intermodal services		1	1		
Letter of credit review and compliance	1	1	4	1	
Management and performance reports	3	3	7	2	
<i>Order processing</i>	7	7	9	1	
Order picking and packaging	7	7	7	2	1
Overseas distribution	4	5	5	3	2
Overseas sourcing			6	1	
Pickup and delivery	4	4	5	5	1
<i>Product modification</i>	6	6	5	1	
Product returns and repairs	5	5	5	3	
Selection of carriers, forwarders, and customs brokers	2	3	8	1	
Warehousing	7	7	6	4	1

The category of Potential 3PL Services is quoted from Murphy & Foist, 2000. The purpose is to illustrate the relationship between the 3PL services providers and users, as well as the mismatch between the services provided and desired.

Table 5: The Ten 3PL Services Most Commonly Provided and Used

Most commonly provided services	Percentage of 3PLs providing and planning to provide
<i>EDI capability</i>	100%
<i>Order processing</i>	100%
Order picking and packaging	100%
Warehousing	100%
<i>Freight rate negotiations</i>	86%
Product modification	86%
Customs clearance	71%
<i>Export operations</i>	71%
Inventory management	71%
Assembly, repair, and packaging	71%
Most commonly used services	
	Percentage of 3PLs using and planning to use
Customs clearance	38%
Pickup and delivery	31%
Assembly, repair, and packaging	25%
Warehousing	25%
Import operations	25%
Overseas distribution	19%
Freight consolidation	19%
Inventory management	19%
Product return and repair	19%
Order picking and packaging	13%

Table 5 presents the 3PL services most frequently provided and used respectively. The result is quite surprising. It indicates a mismatch in that only

five services overlap: “Assembly, repair, and packaging,” “Customs clearance,” “Inventory management,” “Order picking and packaging” and “Warehousing.” Even in the overlap cases, there appear to be some large discrepancies. For example, 100% of the 3PL providers offer Order picking and packaging, but only about 13 % of customers currently use this service. Similar discrepancies are found for the other overlapping services.

The services marked by italic in Table 4 refer to the most commonly provided 3PL services that are not used too much by users. These services are for example Bonded warehousing, EDI capability, Export operations, Export Licensing assistance, Freight charge auditing, Order processing, and Product modification. These services are almost done by the 3PL service users themselves currently instead of by 3PL services providers. On the other hand, there is only one service “Overseas Sourcing” that is desired by a few 3PL users but is not offered by any 3PL services provider.

Our major discoveries can be summarized as follows. First, there appears to be a big mismatch between the 3PL services offered and used. More specifically, there is an overlap on only five of the ten most commonly provided/used services. Likewise, there are large discrepancies between the provision and usage rates for these services. Although more empirical work is needed to supplement the descriptive and anecdotal information, it appears that many firms are offering services that are not very important to many customers. At a minimum, the mismatching may affect general customer satisfaction with 3PL companies.

6.2.2 Conclusion

Ten main logistics and transport companies in Borås responded to the questionnaire and most of them accepted the interview. Through the research, the basic and preliminary information about the logistics and transport industry in Borås is illustrated below.

- The quantity of the cargo flow
Borås becomes a regional logistics center naturally, which mainly means the commercial and trade activities made Borås a regional logistics center. The

economy and commercial activities are the driving forces, and the logistics industry is just the service and assistant activities. A lot of companies said they established their business in Borås long before the term “logistics” was concerned. Therefore, without the increase and development of local economy and commerce, the logistics industry will lose the base it is dependent on.

These logistics and transport companies are optimistic about their business in the future. Several companies reported that their business would increase more than 10% annually in the next few years. Most of them are quite interested in the continuously increasing cargo flow in Borås.

- The transportation route

Among those companies, some are local transport companies while others are international logistics and transport companies with offices in Borås. These companies mainly use road and sea to transport their cargo flow. Air and train transport are not used much.

However, the infrastructure system and logistics facilities are complained about as well from this industry, which shows what the companies are concerned at this moment.

- The logistics function or the service required

Most of these companies have their logistics/distribution center inside or outside Borås, which means complicated logistics functions are performed in this area. Therefore advanced logistics facilities are required.

Most companies considered that they conducted logistics activities efficiently or very efficiently and were satisfied with them. But they still keep improving the logistics efficiency in order to serve the customers better. The attention is paid mainly on IT solutions, and the relationship of the whole supply chain.

Although their customers are optimistic about 3PL and are expected to expand more on this; the mismatch between the 3PL services provided and used needs the consideration of these logistics and transport companies. A better way is to

communicate with their customers, to expect their demand and solve the problems for them as they emerge.

6.3 Manufacturing Companies

6.3.1 Analysis

Manufacturing industry is also an important component of the economic activities in Borås. The designed and produced products in Borås extend to a bigger range with concentration on textile and clothes, car and car components. Other products include plastic pipe system, timber and other products for construction and layout, paper products, bakery ovens, etc.

Most of the companies are market leaders in Sweden in their business area and a few are even the industrial leader in Europe and the entire World. These leading companies are e.g. **Volvo Bussar AB**, **Fristads AB**, **Scandicore Svenska AB**, **Brämhults JOS AB**, **Uponor AB**, **Fov Fabrics AB**, etc. **Boråstapeter AB** produces the best quality and most expensive wallpaper in Sweden. Most companies in Borås are part of their business group and therefore have the advantage of strong financial support by the business group. **Swegmark of Sweden**, the European famous manufacturer of ladies underwear, belongs to **Swegmark Group**. **Uponor AB**, the leading plastic pipe provider, is a part of **Uponor Group**. **Fov Fabrics AB**, the international integrated producer of technical woven fabrics and apparel textiles, belongs to **Investment AB Latour**. **Scandicore Svenska AB**, the big manufacturer of paper cores and tubes, is owned by **Mustad International Group B.V.** They benefit from the groups' expertise in various business areas. The strong financial resource of the group enables investments to be made, in order for them to continuously stay competitive.

Most of these manufacturing companies have their headquarters in Borås but have their logistics/distribution centers outside Borås. They settle their business in Borås mainly because of the history reason. Besides that, the advantages of the geography location, infrastructure system, and high quality logistics services also attract a lot of companies. On the other hand, some companies are not satisfied with the geography location, multimodal connections, and the

logistics facilities in Borås. Only one company is unsatisfied with the government policy in Borås.

6.3.2 Conclusion

Thirteen major manufacturing companies in Borås responded to the questionnaire and several of them accepted the interview. Through the research, the basic and preliminary information about the manufacturing industry is presented in front of us.

- The quantity of the cargo flow

Manufacturing industry plays an important role in the economy of Borås. The products have a big range from textile and clothing, paper products, to automobile and its components. All these represent the advanced technology and highest quality of Swedish products, as well as the organizational management skills.

Most of the producers predict that their business will grow at the annual rate of 5% to 10% in the next few years. It means the potential quantity of the cargo flow will keep increasing in Borås.

- The transportation route

The interesting information found from the survey is that all these companies' business scopes are international, mainly in Europe or Scandinavia countries. Some companies' business expands to North America and Asia. All these manufacturers use road to transport their products to wholesalers, retailers or end customers. Sea and rail transportation are used by very few companies. Therefore, there is a heavy pressure on the road transport again and shows a huge potential demand on an alternative transport mode when the current road transport system is over-burdened.

The complaint from the companies about multimodal connections points out that multimodal transportation has a big space to develop while road transportation is used more and more heavily. On the other hand, the logistics facilities in Borås are also expected to become better as diverse logistics activities are to be conducted in this regional logistics center.

- The logistics function or the service required

Most of these manufacturing companies have their logistics/distribution centers outside Borås, mainly because their products are internationally distributed.

More than half of the companies' reported that their logistics cost represented below 3% of their sales turnover, but the rest companies said their logistics cost was a little higher. Most manufacturers felt they operated logistics activities in an efficient way and were satisfied with their current logistics activities. Eleven companies will improve their logistics performance in different kind of ways such as new management system, open a new warehouse, advanced computer system, and supply chain management. They are dedicated to cutting cost and improving the efficiency of logistics operations.

Currently, these companies outsource part of their logistics functions to 3PL providers and are expected to expand more on this in order to concentrate on their core business such as marketing, design, manufacture and management.

6.4 Retail chains

6.4.1 Analysis

There are several significant retailers in Borås such as **Hemtex AB** and **JC Aktiebolag**. Their core business is textile and clothes since they were established in Borås several decades ago. As time goes by, these retail chains have grown to be the European leading retailers in textile and clothing business. In order to reinforce their competitiveness, they concentrate on their core business such as design, marketing and outsource other operational activities such as warehousing, inventory management, transportation, freight consolidation, and other logistics activities.

Market Overview of Clothing Industry

Driving Forces

The clothing industry is affected by a series of external factors, such as changes in GNP and consumers' view of their personal financial situation. Consumer expectations regarding economic development have, in turn, a strong link with economic fluctuations. The demographic structure of the population is another factor affecting demand. Weather and seasonal variations are factors that affect the demand for clothes on a more short-term basis. Autumn and winter are generally the best sales seasons for the clothing sector, partly because the ranges at these times consist of heavier and therefore more expensive articles. In addition, Christmas shopping contributes to increased sales in November and December.

Market Development in Sweden

In 2000 total sales in the clothes market in Sweden were SEK 39 billion. Figures from the Swedish Research Institute of Trade (HUI) show a sales increase in current prices of 3.8 percent in 2000 and the forecast for 2001 remains at 5.0 percent. Since the mid-1990s, there has been a sharp upturn in the Swedish economy, which has led to increased clothes consumption, with 1999 being an extremely strong year for the retail trade as a whole and for the clothes sector. The year 2000 also began with continued rapid growth, but there was a slight slowdown at the end of the year. The weather was a contributory factor, with an unusually warm autumn and winter. Low sales in relation to expectations led to such actions as many players bringing forward their sales of

autumn and winter clothes and selling larger volumes of clothes at reduced prices. The improvement in public finances in recent years, reduced unemployment and low inflation are expected to have a positive effect on consumer spending, although there are counteracting factors, such as a slowdown in the stock market.

Although these retail chains developed in the textile and clothing industry of Borås, this area maybe lacks something to maintain these companies after they have gotten matured. What do these companies need more in the future? **Lindex AB** moved from Alingsås to Göteborg. **JC Aktiebolag** is moving its offices and business from Borås to Mölnlycke near Göteborg, leaving only its headquarter in Borås, which shows the potential threats in front of Borås and gives us good cases to investigate this problem.

In Sweden, **JC** increased its sales to consumers by approximately 9 percent to SEK 1,766 M in 2000. **JC's** growth thus exceeded that of the clothes market in general, which increased by 3.8 percent according to HUI. **JC** continued to increase its market share and, at the end of the year, held approximately 5 percent of the Swedish clothing market. The problems affecting the clothing sector at the end of the year due to abnormal weather conditions had less of an impact on **JC** than on its competitors. Reasons for this include the fact that **JC** has a broad basic range with jeans and knitwear that are less weather-sensitive. During the year of 2000, the number of **JC** stores in Sweden increased by 27, of which 7 are Group-owned. A total of 5 franchise stores were acquired. At the end of the year, there were totally 193 stores in Sweden. In 2001, **JC** continued to establish new stores in attractive locations and acquired franchise stores in strategic locations according to plan. **JC** is expecting more new stores and business development in the coming few years.

During the interview, I was quite interested in the question why **JC** decided to move its office from Borås to Mölnlycke near Göteborg. According to Stefan Enander, logistics manager in **JC Aktiebolag**, the moving is mainly because of the following reasons:

- After **JC Aktiebolag** acquired **Brothers**, a unique business idea is needed. Neither the office in Borås nor the office in Göteborg is big enough to accommodate the staff of the whole company after merger. So they decided to move to a place called Mölnlycke, which is located between Göteborg and Landvetter International Airport.

- It is easy to find qualified management staff in bigger cities.

Most of the employees in **JC Aktiebolag** are living in Göteborg. Göteborg provides more friends, shops, restaurants, parks and other entertainment than Borås. After taking a vote inside the company, it was decided to move to Mölnlycke.

6.4.2 Conclusion

Four main retail chains companies in Borås responded to the questionnaire and some of them accepted the interview. Through the research and analysis above, the basic and preliminary information about the retail chain industry is presented in front of us.

- The quantity of the cargo flow

Concerning the quantity of cargo flow in the future, the market demand is the core factor. Just like the mail-order industry in Borås, these retail chains are mainly specialized in textile and clothing products mainly because of the history and tradition.

- The transportation route

The cargo flow mainly comes from Asia and the Far East, and then goes to Nordic countries. Therefore most companies transport cargo flow by road and sea. In some cases, they transport by air as well.

- The logistics function or the service required

Most companies deemed that they performed logistics efficiently and logistics cost was low. Two out of four companies will improve the logistics efficiency and control logistics cost by supply chain development and constant improvement with their transporters and logistics partners.

According to the survey, none of the four target retail chains has their own logistics/distribution center. Instead, they outsource material handling activities to 3PL firms. The life cycle for clothes is becoming ever shorter, since fashion seasons have a tendency to become shorter and larger in number. A key factor for creating speed, flexibility and clarity in relations with the consumer is control of the value chain, from design and production to marketing and sales to the consumer. For retail chains like **JC**, control of the value chain is a core factor in achieving short lead times and a faster flow of goods. Close relations with selected suppliers and development of logistics are important parts of this work.

To date, e-business has not undergone a major breakthrough. In the clothing sector, e-business has made modest progress, representing less than 1 percent of the market in 2000. It is anticipated that e-business will grow in importance as consumption patterns change. The fast development of e-business requires a high level of logistics support.

6.5 Trade and Commerce Companies (Import and Export Companies)

Borås is traditionally a trade and commercial center. It enjoys an extensive foreign trade through 1,500 import and export companies. The regional customs office is one of the largest in Sweden. Fifty percent of all textile and clothing-goods in Sweden are still going via Borås. In the year of 1974, there were 25,000 employees in this industry while there were only 1,900 employees in 2000.

There are also big companies in other business field rather than textile and clothing-goods. **Matkompaniet AB** is one of fastest growing independent wholesalers in the food and confectionary business. Through its sales force, **Matkompaniet AB** covers all of Sweden, and makes the delivery from its warehouse directly to the customers.

Only two import and export companies responded to the survey. Most import and export companies in Borås are small. Therefore, the influence of their logistics activities on the changing cargo flow will not be discussed deeply here.

6.6 Conclusion

During the process of transforming from an industrial society to the new reality based on knowledge and service, diverse industries grow up in Borås, making it a modern multi-industry community. Based on its history and tradition, the core business in Borås is still having close relations with clothing, textile and apparel industries.

Through the analysis of each industry's business and logistics activities in the above sub-sections, we can find out where Borås can make itself better as a regional commercial centre and logistics centre, as well as where it may feel threats in losing its industrial dynamic.

In order to answer these important questions, we should explore the problems in more detail and make a complete conclusion.

The Quantity of the Cargo Flow

- Demand of inside market
- Demand of outside market

Borås is a city full of energy and dynamics strength. The local major companies have business in an international spectrum, mainly in Europe. They settle their business as well as logistics activities in Borås mainly because of the history and traditional reason: Borås is always the center of textile and clothing industries. Borås is also an ideal location for Scandinavian distribution, which attracts companies' attention to Borås as well.

According to these target companies, most of them predict that their business turnover will have an annual growth rate of more than 5% and even more than 10%. The faster growth rates mainly come from logistics and transport industry, which shows a positive forecast on the cargo flow in Borås in the future.

The Transportation Route

- Suppliers
- Geography location of the market
- Choice of different transport modes

The customers and suppliers are mainly international, most of which are in Europe. It means the trade relationship is mainly with other European countries as well as Baltic region.

Because of the geography location of Borås, as well as the geography characteristics of European continent, the most used transport modal is road. The second is sea, while air and rail transport is not used much. This puts a heavy pressure on road transport in Borås and limits the multimodal transport in this area. According to some companies, it is necessary to improve the infrastructure system, especially the road transport system from Borås to other destinations. It is also necessary to improve the logistics facilities in order to meet the complicated and diverse logistics performance in this area.

The Logistics Functions or the Service Required

External:

- Market & industrial trend

Internal:

- Logistics cost control
- The requirement to improve logistics operation efficiency
- Company's strategy

Most of the major companies house their headquarters in Borås because they set up their business from this area. Most of them have their logistics/distribution centers outside Borås mainly because their business is international in character. Other reasons are that the logistics facilities and logistics services in Borås cannot satisfy the demand for the distribution.

Most companies consider their logistics operations efficient or very efficient, and are satisfied with their current logistics activities in Borås. Although most of them said their logistics cost was low or even very low, many companies thought their logistics cost was high or even very high. Most of the companies will improve their logistics performance efficiency and control cost. At the same time, the current logistics and transport companies expect the annual business growth rate of more than 10% in the next five years. All the information shows a big opportunity for logistics to develop in Borås.

No matter following the trend of outsourcing, or making internal strategy to concentrate on core business and cost control, the 3PL has a great potential to develop in the modern business. 3PL services providers and users are all optimistic about this field while more cooperation is supposed to happen during the process of the whole supply chain development. However, it seems that there is some difference of business focus between 3PL providers and users, because the mismatch between the 3PL services provided and used is discovered. It appears that many logistics and transport companies are providing services that are not very important to many customers. At a minimum, the mismatch may affect general customer satisfaction with 3PL companies.

7 Strength, Weakness, Opportunity, and Threat in Front of Borås

Last chapter gives us a fundamental perspective about the advantages and disadvantages of Borås during its municipality transferring. In this chapter, based on the research and analysis of previous chapters, we will try summarize the strengths, weaknesses, opportunities and threats that Borås is facing in its development as a regional logistics center. Furthermore, this SWOT analysis will lead us to make different logistics scenarios for the city of Borås in next chapter.

7.1 Strengths

A distinctive strength can be interpreted as a core competency i.e. something that makes the city competitive.

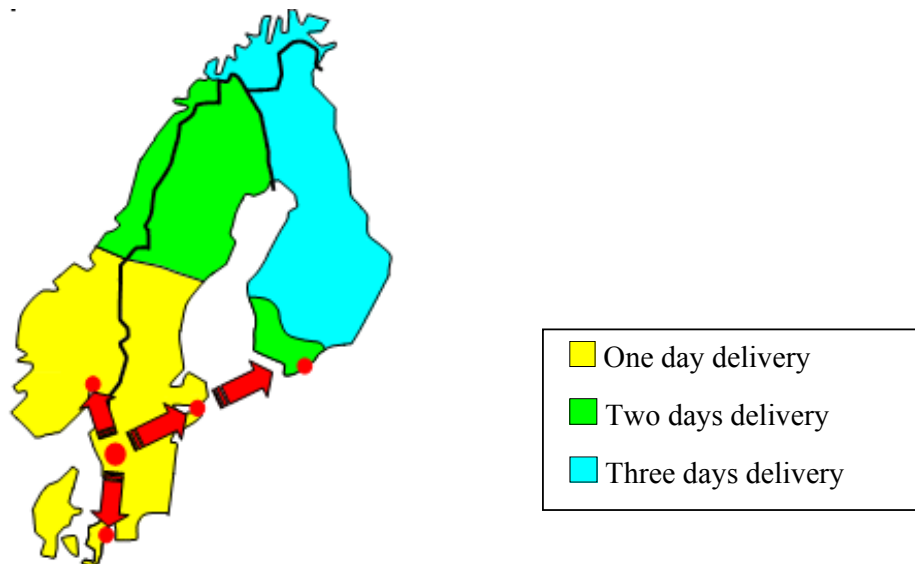
- What are Borås' advantages?
- What does Borås do well?
- Why are the companies willing to set up their business and logistics activities in Borås?
- What do other cities or companies see as Borås' strengths?

We defined nine distinctive strengths.

- Borås is a good geographical location for the distribution to Scandinavia countries.

Borås is in the center of Scandinavia and the Baltic region. The infrastructure system is quite advanced and convenient for Nordic distribution. Stockholm, Copenhagen and Oslo can all be reached by truck within 6 hours. That is one of the reasons why **Play Nöjesdistribution** moved from Stockholm to Borås long time ago. From figure 2, we can see a draft picture of **Play Nöjesdistribution**'s Nordic distribution by truck.

Figure 2: Time Zone for Borås Distribution

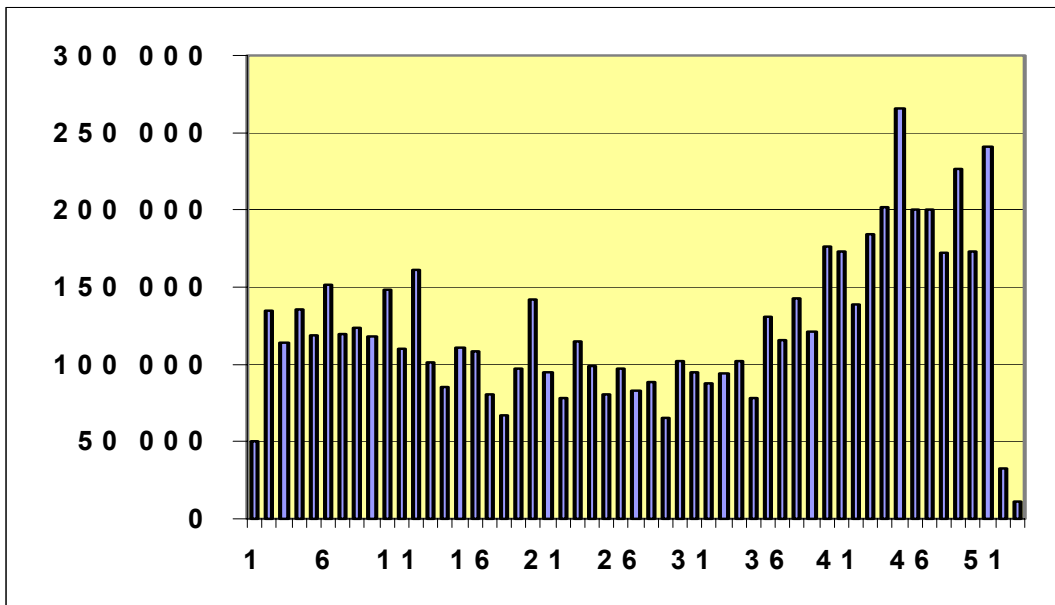


Source: Leif Bjerborn, **Play Nöjesdistribution**

➤ The tradition of trade makes Borås an ideal place to do business. The long history of trade in this area contributed to a good relationship between companies and the Trade Union in Borås. As we know, each industry has its distinctive business cycle. Let's use **Play Nöjesdistribution** as an example. From January to March, the company's business is good because it is cold and dark outside and people would like to have in-house entertainment such as reading, going to cinema, listening to music and watching VCD at home. After March, the sales turnover decreases because it gets warmer and warmer outside and people would like to do out door activities. In summer, the business reaches its bottom because everybody goes out, enjoys the sunshine, and goes abroad travelling. This situation continues to September. After that, the sales turnover climbs up again and reaches its peak before Christmas.

Figure 3 is about the "Transport Costs of Playstation software in 2002" of **Play Nöjesdistribution**. The horizontal axis gives the number of weeks. The numbers of the vertical axis are the cost per week this company has paid for transports of Playstation software during 2002 to the customers. The currency units are SEK. The company thinks this a good way of measuring the business variation over the year.

Figure 3: Transport Costs of Playstation Software in 2002

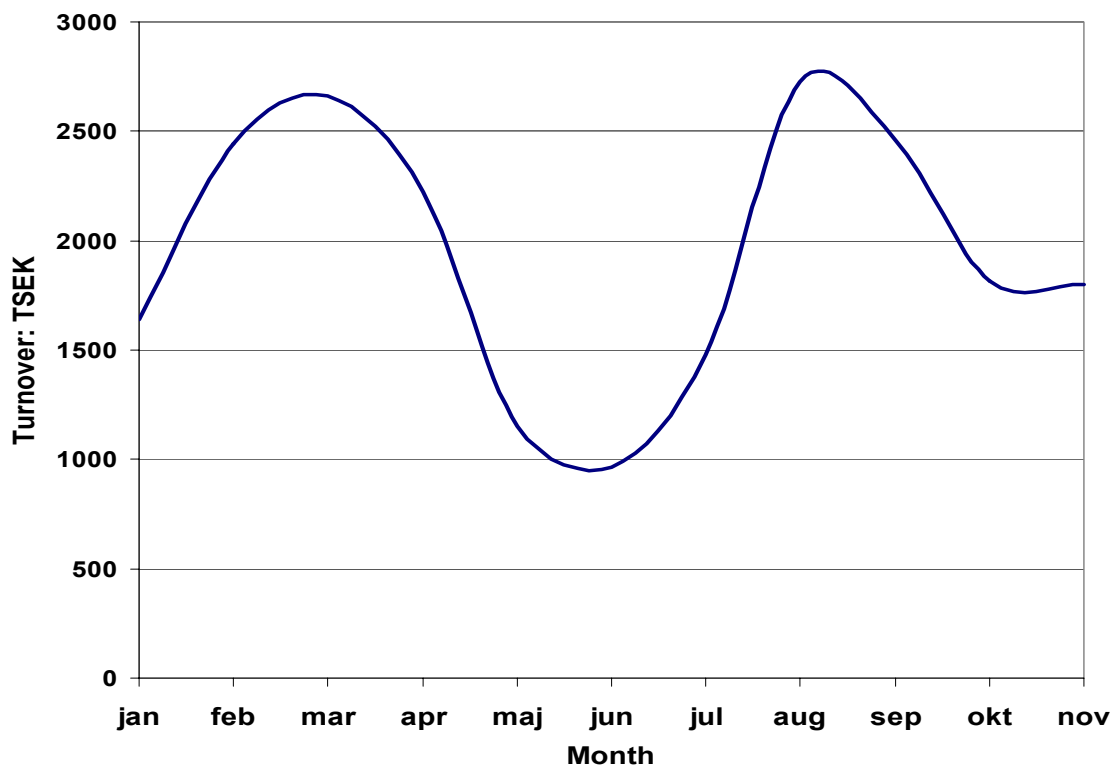


Source: Leif Bjerborn, **Play Nöjesdistribution**

Therefore, the employees' working time is different according to the business seasons in Play Nöjesdistribution, but the total working time of the whole year is equal to other companies' time. In business peak period, the employees work nine hours per day. In business bottom period, they work seven hours per day. They work eight hours per day during other time.

The logistics and transport companies have another kind of business variation. Figure 4 is the "Season Variation of **Danzas ASG Texport AB**."

Figure 4: Season Variation of Danzas ASG Texport AB



Sources: Jörgen Willborg, **Danzas ASG Texport AB**

The horizontal axis is the month, and the vertical axis represents turnover (thousand SEK). The business of **Danzas ASG Texport AB** depends heavily on the textile and clothing market. Its business peak is usually two months earlier than the business peak of textile and clothing industry. Because the best business for clothing industry is usually in spring and autumn, the busiest time for **Danzas ASG Texport AB** is normally in March and August.

Because of the long history of trade in this area, it is easy for the Trade Union in Borås to understand the characteristics of different companies. They can make an agreement on such issues as different working times during the different periods as long as the total working time is qualified. Therefore, the companies in Borås have great flexibility to handle such issues. It is not easy for this kind of problem to get through in other cities.

- The tradition of textile, clothing and apparel industries have a long and deep impact on Borås, which offers an ideal investment and business environment for relative industries.

The business tradition in textile industry not only attracts textile and clothing manufacturers, wholesalers and retailers to have their business in Borås, but also appeals to some logistics and transport companies to provide specialized services for their textile and clothing business customers.

Danzas ASG Texport AB and **DFDS** are two excellent players in this area. “If you can handle clothes, then you can handle anything,” according to Jörgen Willborg, the controller of **Danzas ASG Texport AB**. Textile and clothes have a special demand on the logistics and transportation. The main customers of **Danzas ASG Texport AB** are textile and clothing related companies because **Danzas ASG Texport AB** can provide expertise solutions to them. Some of the customers are located in Borås while others are outside of Borås. **Danzas ASG Texport AB** is trying to catch more non-textile customers in order to balance the business variation caused by textile and clothing industry. Currently its biggest customer is **ICA**. It also delivers book, multimedia and shoes to **ICA** outlets throughout Sweden.

- The mail order companies in Borås play a leading role in this industry in Sweden and Scandinavia. Borås is the business and information center for mail order industry.
- A great amount of medium size and small size firms in different kinds of businesses makes the local trade and business very dynamic.

The long history and trade tradition contribute to the great amount of medium size and small size firms in different kinds of business. Almost everyone in

Borås has the conception of trade. These dynamic trade and commercial units create fantastic business environment.

According to Per-Erik Nilsson, the regional manager of **DFDS Transport AB**, the company is building a new warehouse in Viared in order to centralize the current five warehouses into two. They outsourced the project to a local consulting company instead of big companies such as **NCC** or **Skanska**. Then this consulting company split the whole project and assigned all sub-projects to other local small companies specialized in different fields such as windows, walls, etc. Finally this consulting company will give **DFDS** a budget report including the detailed budget from different small companies and the fee the consulting company will take. So everything is very clear on behalf of **DFDS**. Most important, **DFDS** can save building costs of about 20% by outsourcing the project to this company compared with the price **NCC** and **Skanska** provided.

Therefore, in Borås, this special dynamic commercial environment makes it possible to outsource diverse business to specialists, which is much hard to conduct in other cities.

- Several key factors, such as high quality logistics services, light traffic congestion, lower cost and convenient transport system, work together, which makes Borås an efficient logistics center.

The cost is much higher for business in big cities, such as land cost, transport cost and employee cost.

- Borås has advantage of stable employment.

In big cities like Stockholm and Göteborg, job opportunities are plentiful compared to Borås. Therefore, the employment in big cities is not stable because people can find jobs more easily. However, it is not so easy to change job in smaller cities. So the employment condition is steady in Borås, according to Jörgen Willborg, the controller in **Danzas ASG Texport AB**. That is another reason for **Play Nöjesdistribution** to move from Stockholm to Borås, according to Leif Bjerborn, the logistics manager of **Play Nöjesdistribution**.

Another good advantage is that it is easier to find logistics staff in Borås than in other big cities.

- The University and other institutes provide research and business support to the local business.
- A close relationship exists among different companies and different industries.

There are manufacturers, designers, wholesalers, retailers and transporters. They not only do business with the outside, but also have close relationship with each other in their own supply chain. For example, both **JC Aktiebolag** and **Salomon Sport AB** outsourced their material handling business to **DFDS** in Borås. When **JC** started the business in 1969, the relationship between **JC** and **DFDS** was set up at the same time. As time goes on, the relationship gets tighter and tighter. **JC** and **DFDS** are not in the opposite site to each other but are in a parallel relationship to each other, according to Stefan Enander, the logistics manager in **JC Aktiebolag**. They have endeavored together for the whole supply chain's development. Therefore, although **JC** moved its offices from Borås to Mölnlycke, **DFDS** still handles **JC's** logistics activities. It means that there is no influence on **JC's** cargo flow in Borås.

Pedab Distribution is specialized in distributing IBM PC and LEXMARK printers to about 200 retailers in Sweden. It settles its business in Borås mainly because its mother company, **Pulsen AB**, is situated in Borås.

Besides the strength as an ideal geography location, to Borås, the other important advantages are the tradition of textile, clothing, as well as the center of mail order industry, which are the precipitation of history and culture, and are irreversible investments. Other cities can hardly replace Borås when the companies in those industries can hardly find such a good business environment where resources and business information are easy to get. The close relationship existing in different companies, especially within the textile and clothing industry, makes the area more attractive.

7.2 Weaknesses

Structural weakness is the bad side of Borås. This alerts managements to do something to solve the problem. The structural weakness indicates an area of desirable development, in order to be competitive.

- What could Borås improve?
- What does Borås do badly?
- What makes the companies feel unsatisfied?

We defined four structural weaknesses.

➤ The infrastructure system is not satisfactory in Borås.

The highways from Göteborg to Borås and from Jönköping to Stockholm are good, but the road between Borås and Jönköping is terrible: too narrow, too much congestion, and several traffic accidents per year. The roads from the south of Sweden such as Malmö to Borås is not good either.

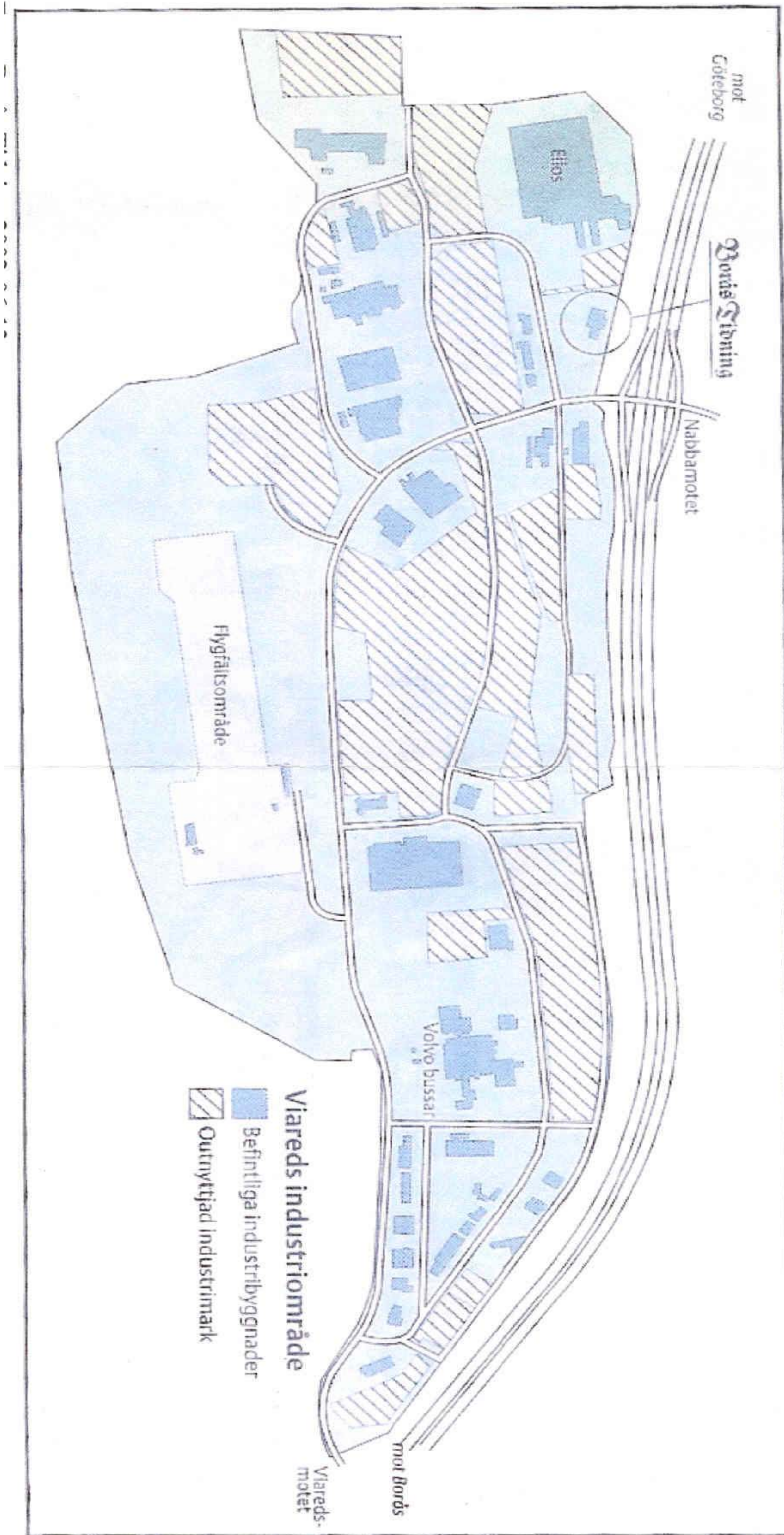
➤ There is pressure on road transport and it causes big congestion problems when Viared is fully used.

➤ The logistics facilities are in great demand in Borås as more and more complicated and diverse logistics activities are to be conducted in this area. According to Jörgen Willborg, the controller of **Danzas ASG Texport AB**, as the business is expanding rapidly, a second warehouse is needed besides the one in Ramnaslätt where the company is located currently. However it is hard for the company to rent a qualified warehouse in Borås or near Borås. Therefore, the company had to build a new warehouse in Viared by itself. With the strong financial support by its mother company **Danzas**, a new warehouse has been completed already and is being used for the new business. But the problem is that not all the companies have strong financial support. They will face a very uncomfortable situation when business is expanding but financial investment is insufficient.

“Our facilities are placed in a small suburb in Borås. It was not built to take that heavy traffic that our company demands now. Since we are continuously growing, there is no more room to build in this area,” said Anders Haglund, the logistics manager of **Brämhultsjos AB**. The similar opinion was given by Per-Erik Nilsson, the regional manager of **DFDS Transport AB**. He said, in order to have two big warehouses instead of five, **DFDS** is building a new warehouse in Viared. “There are many companies establishing their offices in Viared, a lot of which are logistics and transport companies,” said Per-Erik Nilsson. From the figure below, we can find out about Viared, how much land is being used, and how much land is available.

In the figure, the darkest area means the land used currently, and the stripped area means the land still available. It seems that the Viared will be full soon. Even in the available area, some part is not suitable for building a factory due to the geographic feature. At that time, where will Borås extend?

Figure 5: Map of Viared



Sources: Per-Erik Nilsson, *DFDS Transport AB*

➤ There is serious mismatch between the 3PL services provided and used. This apparent mismatch between the services provided and used raises important questions for both parties. Should the 3PL providers focus on certain services rather than offer a “laundry list”? Should 3PL customers pay attention to the providers’ breadth of services or expertise in specific areas?

The mismatch highlights the importance of effective and continuous communications between both parties. The key factors to gain a successful 3PL relationship are the effective communication and continuous improvement to the changes outside. Rather than just keep pace with the customer demand, 3PL providers need a higher level of communication and longer sight into the industry, which enable them to “anticipate customer need and deliver solutions to problems and issues as they emerge.”

7.3 Opportunities

In order to figure out the opportunities, we try to uncover areas where the strengths are not being fully utilized.

- Are there emerging trends that fit with Borås' strengths?
- Is there any area that Borås could do well in the future?
- What can Borås benefit from the internal and external changes?
- Where can Borås make itself better?

Useful opportunities can come from such things as:

- Changes in technology and markets on both a broad and narrow scale
- Changes in social patterns, population profiles, lifestyle changes, etc.
- Local Events

We defined three current opportunities. Current opportunities are what the organisation could seize without too much trouble and should consider action in this direction.

- Borås can be a commercial center offering relatively cheaper clothes & other goods relating to local business.
- More diverse and comprehensive logistics services are required by the companies in Borås.
- The advanced information technology makes modern supply chain management more efficient and effective.

Future opportunities point the way forward in terms of developing towards emerging business. Very often these future opportunities are mirrored by some implication in other quadrants i.e. a structural weakness could indicate the potential to develop a distinctive strength and be a future opportunity. There are six future opportunities.

- The ideal business environment makes Borås an original place for some kinds of business.

For example, as the origin and center of textile and apparel industries in Sweden, Borås attracts relating companies.

- The globalization means larger market, cheaper and better resources and supply. Effective, efficient and convenient communications and information obtainment are required.

As economy becomes more and more worldwide and global, the international transport is increasing. Many international companies are establishing their business in Scandinavia and the Baltic region that are very interesting markets. Borås' location in the center of the circle of Scandinavia and Baltic region as well as its convenient transportation system will be of great advantage in attracting new businesses.

- Borås is a good choice for the companies that will move business out of big cities.

Some big cities become more and more unsuitable for business because of heavy traffic congestion and high logistics cost. Some companies will move logistics activities to other cities where convenient transport system, lower logistics cost and qualified logistics services can be found. Then Borås will be a very good choice.

- As long as the undergoing projects are finished, the new infrastructure system will backup the local logistics activities in a much better way.

To a company, an efficient traffic system means more money and time to be saved and maintaining competitive in the market.

- 3PL will be a trend.

As companies are concentrating on their core business in order to maintain competitive, contracted logistics becomes the trend. It attracts more and more 3PL logistics services providers and other specialized services providers to do business in Borås. This trend will push Borås to a modern logistics center.

- The area between east of Göteborg and west of Borås has great potential to develop in the future.

The highway between Göteborg and Borås is in a very good condition. Because of expensive cost and heavy congestion to have business in Göteborg, the business area in Göteborg is expanding towards east. To the companies in Borås, they would like to seek better transport solutions, and a lot of their

employees are from Göteborg or other small cities near Göteborg. In order to be nearer to harbour and airport, attract more qualified employees and decrease the business cost, the business in Borås is expanding towards the west. It comes out that this area will have a promising future with more and more companies and residents. Consequently, it will create more cargo flow for Borås.

7.4 Threats

Carrying out this analysis will often be illuminating - both in terms of pointing out what needs to be done, and in putting problems into perspective.

- What obstacles does Borås face?
- What are the competitors doing?
- What may prevent the companies from developing and what may make them move away their business and logistics activities from Borås?
- Are the required specifications for products or services changing?
- Do the national economy and lifestyle changes have any negative effect on the business or logistics functions?
- Is changing technology threatening?

We defined two immediate threats, two medium term threats and three long-term threats.

Sometimes the only way to deal with short-term threats is by a significant strategic response. If this threat cuts to the core of the business activity it could be well evidenced as a structural weakness. The admonition here is that management should rather engage in excellent planning to foresee threats well ahead of time. Threats are often from the external environment and are often ignored by preoccupations with operational matters.

Immediate Threats:

- Tough economy has a negative effect on market demand.
- It is hard to attract qualified staff to work in small cities like Borås. Big cities like Stockholm and Göteborg are more attractive because they provide more job opportunities, more museums, more shops and restaurants, more chances to make new friends, diverse entertainment after work. Borås as a smaller city has a disadvantage in this case. A qualified employee is the most important resource for a company. If companies in Borås could not find qualified staff, they have to move to another place in order to find the employees they want.

Besides, another disadvantage of Borås is that it lacks good flats, which will be a big problem in attracting young people to stay because they cannot afford a house or villa.

Medium term threats are indicated below. The fact that this threat is somewhere in the medium term future should not be a comfort as environment is dynamic and can change rapidly.

Medium term Threats:

- The current infrastructure system cannot satisfy the transport requirement; especially road transport is under serious pressure.
- It seems that some services offered by 3PL firms are not important to customers. On the other hand, some logistics services most desired by 3PL users do not get the attention of providers. The unsuccessful 3PL relationship may prevent the business and logistics development in Borås.

Long-term threats are presented below. Just because a threat appears to be much further into the future is no cause for complacency. **JC** set up its business in Borås in 1969, but the top management level recently decided to move their offices to Mölnlycke. Why did **JC** make such a decision? It shows a serious potential threat that Borås is facing in the long run.

Long term Threats:

- A lot of companies started and grew up in Borås because of the history and tradition. But as soon as these companies become mature, they will seek more resources to develop and maintain competitive in the market.

These resources are for example high-qualified employees, market information, global distribution, etc. If they cannot obtain these resources from Borås easily, they will move out. In this case, they will usually move to international municipality that could be the economy center, logistics center, human resources center, manufacturing center and information center at the same time.

Another factor to make companies move is business expansion or market shift. Lars Sjölund is the head of the business and logistics development of H&M Rowells AB in Borås as well as a member of the board of SMOTA (Swedish

Mail Order and Traders' Association). He deems that the mail order business will increase rapidly in the short term because of the market expansion to Denmark and Finland. But in the long run, Borås might miss some of the business. After the business expands around the Europe, the company will probably move its warehouse or offices from Borås to another place in the center of Europe.

- There seems to be a shortage of cooperation among the companies as well as between the companies and the government in this area, which is a serious barrier for the local economy to develop.
- Several small cities are improving logistics functions. These small or satellite cities are the competitors of Borås when business is moving from big municipality to small cities.

So far, the strengths and weaknesses of Borås as a regional logistics center are presented. The possible opportunities and threats relating to the cargo flow generated by the major companies and industries in Borås are uncovered as well. Based on the SWOT analysis above, logistics scenarios will be made in the next chapter.

8 The Different Scenarios for Borås as a Regional Logistics Center

At this stage, based on the analysis above, different logistics scenarios are proposed concerning the features of Borås. In doing the model of different logistics scenarios, on the one hand, we will continue the direction for Borås to maintain its strengths and realize its opportunities; on the other hand, we will follow the track to overcome the weaknesses and avoid the potential threats in front of Borås.

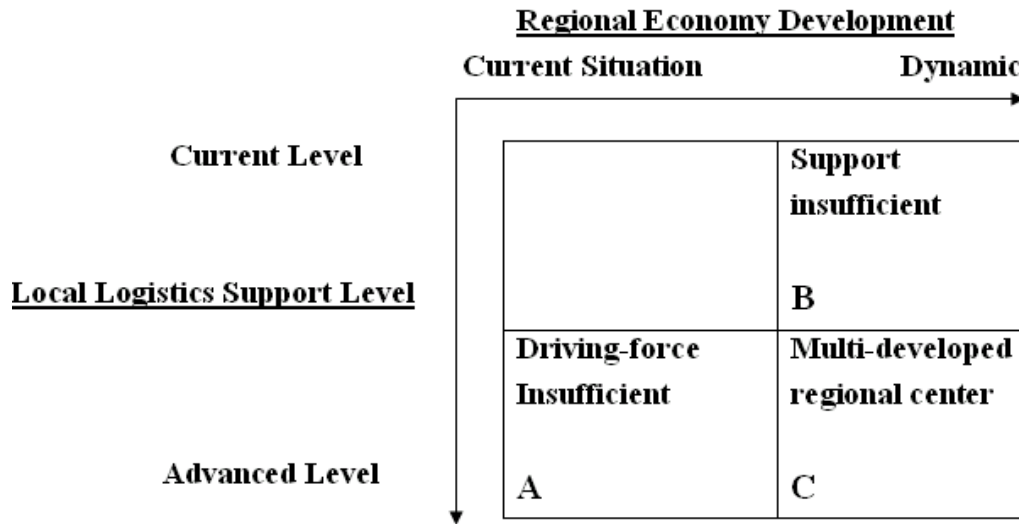
From the logistics supply's side, Borås will become an ideal location for Scandinavian distribution as the hardware and software of logistics services in Borås is upgrading continuously. Borås will attract more and more companies to have business and provide advanced and suitable logistics services and solutions to different kinds of business.

From the logistics demand's side, as we mentioned before, Borås as a small inland city becomes a regional logistics center mainly because of the history and tradition. It is the local economic activities that make Borås a logistics center. Economy and commercial activities are the driving forces of the city development, while the logistics industry is the assistant factor. For Borås to continue the position as a regional logistics center, the radical driving forces – social economy development and local dynamic business are the key factors. Social economy development means strong market demand. Local dynamic commerce and business mean good business environment and huge development space for Borås. If Borås can take the opportunities of globalization and regionalization and successfully avoid the potential threats, the city will become a multi-developed community with several core industries such as mail-order industry and textile and clothing relative industries. If so, there will be a huge potential and diverse logistics services demand in this area.

The combinations of these complex variables will be tested within the scenarios in figure 6. To simplify the model, we used two axes.

“Local Logistics Services Support Level” refers to the hardware and software quality of logistics services in Borås as a logistics center. “Regional Economy Development” represents the condition of social economy development and commercial and business activities in Borås.

Figure 6: The Set of Axes and Variables for Different Logistics Scenarios



We define three different logistics scenarios according to the different combinations of factors affecting of both axes. We excluded the combination of current local logistics services support level and current situation of regional economy development because we have discussed the strength and weakness of Borås as a logistics center and drawn a clear picture of the current logistics situation in previous chapters. (It is not necessary to repeat it all here.)

The “Scenario of Driving-Force Insufficient” (A) originates from the combination of high level of local logistics services and current situation of regional economy development. The “Scenario of Support Insufficient” (B) combines the current level of local logistics services and dynamic regional economy development. The last one is “Scenario of Multi-Developed Regional Center” (C) that is the combination of advanced level of local logistics services and dynamic regional economy development. The possible consequence of every logistics scenarios will be explained in each section.

8.1 Scenario of Driving-force insufficient (A)

This scenario originates from the combination of high level of local logistics services and the current condition of regional economy development.

The situation of local logistics service is getting better and better. The infrastructure system, especially the road transport system, becomes more convenient and satisfying, which ensures the Scandinavia distribution to be more effective and more efficient. The multimodal transportation is strengthened, which decreases the traffic pressure on road transport and stimulates the development of other transport modes such as rail and air transport. Local logistics facilities are kept upgrading, which ensures that the diverse and complicated logistics activities can be conducted successfully in this area.

The relationship between 3PL services providers and users is satisfying. 3PL service providers can anticipate customers' demand and deliver solutions to customers as long as problems emerge. 3PL services users pay more attention to their core business and outsource other business activities to the firms that are really experts in such business areas.

From an external point of view, as the companies' business scope is mostly in Europe, especially in North Europe, the economy in Sweden and Europe has great effect on the business in Borås and consequently affects the cargo flow in Borås. The current economy development in Sweden seems a little weaker compared with the economy development in 1990s. It has a negative effect on market demand and therefore has a negative effect on transport industry in terms of goods quantity.

From internal point of view of this area, we would like to discuss something about local competition and cooperation. Borås is a place attractive to mail order companies and other companies specialized in textile and clothing products. Therefore, there might be some kind of cooperation between different companies in this area. Such as **Swegmark**, the European famous manufacturer of ladies underwear, is the supplier of **Ellos**, **Josefssons** and **Hööks**. This kind of cooperation can reinforce the industrial development in Borås when all

parties involved can benefit from the cooperation. On the contrary, if there is only one kind of industry such as mail order industry, or if there are different kinds of companies, but they all have separate businesses, then there is only competition but no cooperation. Can we imagine an area full of competition but no cooperation? The result is that the development is limited. During the interview, some famous companies have the same opinions. They think there is some shortage of cooperation among the companies as well as between the companies and the government in this area. It seems that most of the companies are so separate from each other, that it will have a negative effect on the business development in this area.

Another important factor making the local economy dynamic is that the city of Borås should have the ability to attract more people to live in this city, especially the young people and working people. There are good high schools and a good university in Borås for young people. But Borås has to maintain the young people after they grow up and finish their studies. It means Borås has to create good work opportunities as well as diverse entertainments for them. For example, the average age of the employees in **JC** is below 30 years old. That is because the target group of the market is young people and the company needs to understand what they like. People would like to have more entertainment to fill their life after work. It seems that bigger cities have advantages on such issues. If Borås is unable to satisfy them, they maybe go to bigger cities to look for new job. The unstable employment may hurt companies a lot for it is more different to attract qualified staff in small cities. Some companies may move to other cities because of these reasons.

If the driving force is insufficient for Borås to develop, even if the logistics support is advanced, there will be a lot of problems. Without the stimulation of the commercial driving force, the cargo flow won't increase a lot and the logistics industry in Borås won't develop rapidly.

8.2 Scenario of Support Insufficient (B)

“Scenario of Support Insufficient” combines the current level of local logistics services and dynamic regional economy development.

This scenario holds a positive opinion to the economy and business development in Borås. From an external point of view, the social economy recovers from stagnancy and keeps increasing. The globalization also leads to the new market and new trade chances. For example, after China entered WTO, the trade volume keeps increasing. Both the Chinese government and Swedish government are dedicated to the development of the business relationship between the two countries. The recovering economy will create more job opportunities and consequently increase purchasing ability. Therefore, the market demand increases, which brings the volume and value of cargo flow to increase as well. The logistics and transport activities are stimulated.

Göteborg expands towards the east while Borås expands towards the west. The area between Göteborg and Borås is exploited a lot. The various costs outside the city are usually much cheaper than the cost inside. More and more companies move their offices especially logistics activities to this area. More and more people would like to live in this area. It takes only 50 minutes by highway or by train from Borås to Göteborg. Viared is a good start and example. But if Viared is fully used, it needs more space in order to accommodate new companies. This trend will bring a huge potential cargo flow for Borås.

Borås as a Nordic distribution center, the convenient transport infrastructure is one of the most important factors. The cargo flow is mainly from European countries, Asia and the Far East, and goes to Nordic countries. Concerning the transport from non-European countries, sea transport is mainly used. Within European distribution, the cargo is mainly transported by truck. Borås is near Göteborg harbour, so the sea transport is very convenient. Cargo is usually unloaded in Göteborg harbour from the ships and uploaded to the trucks to go to other destinations. Huge cargo flows to the big markets of Stockholm or Finland or other east Baltic countries also go through or from Borås. Therefore, the road section from Borås to Jönköping is very important. There is a project

constructing the highway between Borås and Jönköping, but a lot of problems concerning fund and plans simultaneously exist.

It is very important for logistics and transport service providers to satisfy customers' demand. Usually 3PL companies customize service according to customers' requirement. As we said before, **Danzas ASG Texport AB** had to invest a lot to set up a new warehouse in order to serve the new customers because it could not find a qualified logistics facilities in or near Borås. If the logistics services providers fail to provider solutions to their customers, it will be a both-sides hurt: hurt the customer's business and hurt the logistics industry in Borås.

In this case, the logistics service users may look for logistics solutions to other 3PL companies outside Borås, which will probably have a negative influence on the current cargo flow because the new 3PL companies may have the warehouse or distribution center in the competitor city instead of Borås. On the other hand, the logistics service providers may go out of Borås to seek qualified logistics facilities and use them as new warehouse or logistics centers. This will also lead to the decrease of cargo flow in Borås.

Therefore, we come to the conclusion that if the hardware and software of logistics services are not qualified, if the logistics support is insufficient, it will be a both-sides hurt to logistics services users and providers, and it will be a both-sides hurt to the business development and logistics development in Borås.

8.3 Scenario of Multi-Developed Regional Center (C)

“Scenario of Multi-Developed Regional Center” is the combination of advanced level of local logistics services and dynamic regional economy development.

This scenario is the ideal situation for Borås as a regional multi-developed center, such as commercial center, logistics center, human resources center, manufacturing center, etc. In this case, the local business and logistics support are working well together. First of all, the local dynamic business activities irritate the logistics activities. Secondly, the area between the west of Göteborg and east of Borås is getting more and more prosperous with more and more cargo transportation taking place. In addition, because of its pivot geography location in Sweden and Scandinavia, Borås will attract more and more cargo flow to pass through.

On the other hand, the satisfying transport infrastructure system, the advanced logistics facilities and the high quality logistics services providers contribute to a strong logistics support to the business. No matter how the demands differ from products to products or from industry to industry, the logistics service’s hardware and software in Borås are able to provide excellent solutions to them.

More over, the dynamic local economy, plentiful entertainment and social activities in Borås will attract more and more educated people to work and live in this area, which ensures the qualified human resources for the local companies.

Last but not least, the local university and research institute are able to pay more attentions to the business management. This will meet the companies’ requirement on higher level management staffs because of the business development. According to Leif Johansson, the managing director of Redcats Nordic, as the business develops, the company wants to get high quality management staffs from their current employees. Therefore, they would like to have the opportunity to have their employees trained in the local university. But unfortunately, there is no such training opportunity from the University in Borås or from other local institutes. But if they can provide such management

training courses for the local companies, it will not only solve the problem of insufficient management staff for the companies, but also reinforce the relationship between the university and companies.

9 Conclusion

Globalization makes resources reallocate. Different areas are benefitting from the application of theory of compared advantage in economy. Today Borås has a new look by the process of transforming from an industrial society to the new community based on knowledge and service. It has been said thousands of times before, but it bears repeating: a new economy is at work. “It is a knowledge- and idea-based economy in which the keys to wealth and jobs creation are the extent to which ideas, innovation, and technology are imbedded into all sectors of the economy,” observes the Progressive Policy Institute, Washington. Significantly, the information-driven new economy is taking shape without borders.

As companies develop, produce, market, transport, and manage a staggering array of goods and services for an increasingly interconnected world, they are tearing down functional barriers of all kinds in an effort to bringing themselves closer to customers. Many communities are working at attaining world-class status, seeking to create competitive advantages for the companies that have their headquarters, R&D, production, logistics, and marketing activities within their municipality boundaries. Nevertheless, it is tough to meet the qualifying criteria: being headquarters center (such as Houston and Stuttgart), production center, marketing center (Seoul), logistics center (Shanghai and Singapore), development center (San Jose and Singapore), and human resources center (Shanghai and New York).

The incentives that communities employ around the world are seemingly different from place to place, but essentially, they are used to attract and retain firms both large and small, and to main the competitive advantage of the municipality.

Borås has a long history of its traditional industry. The incentives to motivate its economy base on its tradition and the direction it will go to: a new reality based on knowledge and service. It means that, in an effort to become such a new reality, Borås will be a multi-developed center: not only be the logistics

center, but also be the commercial center, marketing center, headquarters center, entertainment center, development center and human resources center.

On the base of the three different scenarios we may conclude that in the future the logistics development might be very different according to the different situations of the driving forces: social economy and local business development. Besides that, some other factors will also influence the logistics development in Borås, such as sufficiently qualified employees, plentiful entertainment and social activities, improved transport system, cooperation among the local companies, etc.

In order for Borås to maintain its position as a regional logistics center, to stimulate its local business and to be a multi-developed center, I would like to make some strategic suggestions as the conclusion of this thesis.

The first strategic issue that should be highlighted is the co-operation and trustful relationship within the region. The most important is the even closer co-operation and specialisation of the local firms. The good local business cooperation will save money and time for involved parties and create a tight relationship among them, which is very important for Borås in order to maintain the local companies during the competition.

Secondly, the satisfactory transport infrastructure system and logistics facilities ensure the cargo flow to be transported in an unobstructed way and efficiently. It will also be a core point to attract more cargo flow to go through this area.

Moreover, the qualified logistics service providers play a very important role in the logistics support functions to business activities. The ability of these firms to handle diverse products, perform complicated logistics activities and deliver logistics services' solutions is another important factor.

The fourth issue shows the importance of human resources. Employees are the most valuable resources to a firm. Especially, when business expands, the qualified staffs become more and more important. It is better for Borås to

become more dynamic both in business and entertainment in order to be a good place both for working and living.

Finally, the good co-operation relationship among the local university, research institutes and companies will be a benefit to all parties. The University can provide qualified specialist and management staff for local companies, at the same time the University can improve its reputation and attract more students.

Therefore, regional development policies that assist and coordinate the business unit as well as perspective infrastructure planning and construction should be applied to sustain the possible growth and development in this region.

References

Books

B. Johansson and D. Nilsson (Eds.), *Trade and Transport Flows in the Baltic Sea Region*, Proceedings; Workshop in Copenhagen; September 2000

H. Malmborg and A. Richardson, *The logistics strategy for Wilson Logistics*, Integrated Master Program, Graduate Business School, School of Economics and Commercial Law, Göteborg University, 2000:6.

Articles

A. Coia, "France -- a growing logistics center," *Logistics Management and Distribution Report*, Radnor, Feb 2001

A. Coia, "Logisticians without borders", *Logistics Management* (2002), Highland Ranch, Jun 2002

Anonymous, "DC with 74 docks services 150 trucks per day," *Modern Materials Handling*, Boston, Mid-Oct 2000

Anonymous, "For eVineyard.com CEO Larry Gerhard, slow and steady wins," *Chief Executives*, New Yor, Oct 2001

Anonymous, "Gov't aims to streamline logistics," *Business Korea*, Seoul, Sep 1999

Anonymous, "Making the right connections," *Modern Materials Handling*, Boston, Apr 2002

Anonymous, "Material management system cuts the wires," *Automatic I.D. News*, Cleveland, Apr 1999

Anonymous, "Nation tackles logistics inefficiency," *Business Korea*, Seoul, Sep 1999

Anonymous, "The Rhine-Ruhr Port of Duisburg," *Logistics Management and Distribution Report*, Radnor, Jul 1999

D. Maloney, "Moving to speed dial," *Modern Materials Handling*, Boston, Feb 2001

F. Fiorino, "Logistics center planned," *Aviation Weeks & Space Technology*, New York, Dec 6, 1999

F. Hung, "Synnex takes another step onto the mainland – big Taiwan distribution to set up logistics, warehousing center in China," *EBN*, Manhasset, Oct 15, 2001

J. Abend, "New takes on transportation," *Bobbin*, Columbia, May 1999

J.R. Johnson, "Here's some good news for a change," *Warehousing Management*, Radnor, Sep 2001

J.R. Johnson, "Warehouse of the year 2001: Automation nation," *Warehousing Management*, Radnor, Sep 2001

J.S. McClenahan, "Where manufacturing thrives," *Industry Week*, Cleveland, Apr 3, 2000

J. Parker, "Gateway to Europe," *Traffic World*, Washington, Jun 5, 2000

J. Thomas, "Pfizers prescription for fulfillment," *Logistics Management and Distribution Report*, Radnor, Jan 1999

M. Cruz, "IM-Logistics unveils new benefits," *CRN*, Jericho, May 14, 2001

P. Burnson, "Asia's economic rebound signals changes in logistics strategies," *Logistics Management and Distribution Report*, Radnor, Sep 1999

P.R. Murphy and R.F. Poist, "Third-party logistics: some user versus provider perspectives," *Journal of Business Logistics*, Vol.21, No.1, 2000

Interviews

Anders Haglund, **BrämhultsJos AB**, Logistics Manager, (email 2002-11-25)

Gunnar Ryman, **Haléns**, Managing Director, (2002-11-13)

Johan Wikander, **Total Logistik (Sweden) AB**, Managing Director, (2002-11-25)

Johnny Johansson, **Pedab Distribution AB**, Managing Director, (2002-11-21)

Jörgen Willborg, **Danzas ASG Texport AB**, IT / Financial Manager, (2002-11-21)

Lars Sjölund, **H & M Rowells AB**, Head of the Business and Logistics Development, (2002-11-22)

Leif Bjerborn, **Play Nöjesdistribution**, Distributions Chef / Logistics Manager, (2002-11-19)

Leif Johansson, **Redcats Nordic**, Group Operations Director, (2002-11-12)

Per-Erik Nilsson, **DFDS Transport AB**, Regional Manager, (2002-11-25)

Roger Olausson, **Volvo Bus Corporation, Borås Plant**, Material Control Manager / Logistics Manager, (2002-11-25)

Stefan Enander, **JC Aktiebolag**, Logistic Manager, (2002-11-19)

Ulf Zettergren, **Schenker BTL AB**, (2002-11-25)

Urban Blom, **New Wave Group**, (2002-12-20)

Internet

Borås Municipality

<http://www.boras.se/klk/info/engelska/index.htm>

<http://www.boras.se/klk/info/engelska/facts.htm>

Logistics

<http://fisher.osu.edu/~robeano/CLMDef.doc>

<http://www.iolt.org.uk/howeare/allthat.htm>

DFDS Transport AB, (2002-11)

<http://www.dfdstransport.se>

Ellos, (2002-10)

<http://www.redcats.com/uk/pole/f-ello.htm>

JC Aktiebolag, (2002-10)

<http://www.jc.se>

http://www.jc-online.com/JCInternational/jc2000_eng.pdf

Pedab Distribution AB, (2002-11)

<http://www.pedab.com/>

Redcats, (2002-10)

<http://www.redcats.com>

Swedish Mail Order and Traders' Association (SMOTA) / Svenska Postorder
Föreningen, (2002-10)

<http://www.postorder.se/international.html>

<http://www.postorder.se>

<http://www.postorder.se/nyhetsbrev.html>

SWOT analysis, (2002-10)

<http://www.smartt.co.za/swot/>

Total Logistik AB, (2002-11)

<http://www.total-logistik.se/>

Volvo Bus Corporation

www.odette.org

Appendix: Logistics Activities Questionnaire

QUESTIONNAIRE

This questionnaire is about your company's current logistics activities in Borås.

Instructions

Please, mark the box representing your answer, with the figure "X", like this:

If some of the questions are not applicable to your company, please just ignore them.

Please, answer before the 15th of October 2002 to the following address (a stamped letter is enclosed):

Borås kommun

Näringslivsenheten

Åsa Holmstrand

501 80 Borås

Telephone: +46 33 35 71 15

Company name:

Your name:

Job title:

Elizabeth Wenjuan Zhou

Logistics and Transport Management

Graduate Business School

School of Economics and Commercial Law

Göteborg

1 October 2002

1. Your company is

- manufacturing company
- mail-order company
- import/export company
- IT
- retail chains
- logistics/transportation company
- others (Please specify).....

2. The business of your company is

- in or around Borås
- in Europe
- throughout of the Sweden
- international

3. What is (are) the core competence of your company?

4. To which region/country is the cargo flow mainly distributed / transported?

5. From which region/country is the cargo flow mainly transported?

6. The cargo of your company is mainly transported by? (multichoice)

- train
- road
- sea
- air

7. What advantages are you expecting from Borås when your company established logistics activities in Borås? (multichoice)

- an ideal geography location
- advanced infrastructure system
- advanced and convenient logistics facilities
- multimodal connection
- good environment for investment
- others (please specify).....
- history and tradition advantages
- high quality logistics service providers
- government policy

8. Is there any weakness that is inconvenient for the logistics activities of your business in Borås? (multichoice)

- geography location
- infrastructure system
- multimodal connection
- history and tradition
- current logistics facilities
- high quality logistics service providers

- environment for investment government policy
 others (please specify).....

9. Is the company's headquarter and logistics/transport division both in Borås?

- Yes, both of them are in Borås. No, none of them are in Borås
 Headquarters is in Borås, but the logistics/transport division is not. It is in....
 The logistics/transport division is in Borås, but headquarters is not. It is in....

10. Why did your company settle the company's headquarters in Borås? (If the company's headquarters is not in Borås, please just ignore this question.)

11. Does the company have its own logistics center or distribution center?

- Yes. Where is it (are they)? (Please specify.)
 Under plan. Where is it? (Please specify.).....
 No.

12. What does your company's logistics network include? (multichoice)

- manufacturing site logistics center or distribution center
 wholesaler's distribution center retailer's distribution center
 Others (please specify).....

13. What did the logistics cost account for of the company's sales turnover last year?

14. What do you think about the logistics cost of your company compared with the average level of the industry?

- very high high low very low

15. What do you think about the logistics operation of your company?

- very efficiently efficiently inefficiently very inefficiently

16. Does your company plan to control logistics cost and improve logistics operation efficiency in the near future in order to serve the customer better and do the business better?

Yes. How?

No.

Questions 17-18 are about the potential third-party logistics services

17. To third-party logistics (3PL) services *providers*

Potential third-party logistics services	Which logistics services is your company providing in Borås currently?	Which logistics services does your company plan to provide in Borås in the future?
Assembly, repair, and packaging		
Bonded warehousing		
Consulting services		
Customs clearance		
Development of distribution strategy/system		
EDI capability		
Expedited delivery		
Export operations		
Export licensing assistance		
Freight bill payment		
Freight charge auditing		
Freight consolidation		
Freight rate negotiations		
Import operations		
Information management		
International telecommunications		
Inventory management		
Intermodal services		
Letter of credit review and compliance		
Management and performance reports		
Order processing		
Order picking and packaging		
Overseas distribution		
Overseas sourcing		
Pickup and delivery		
Product modification		
Product returns and repairs		
Selection of carriers, forwarders, and customs brokers		
Warehousing		

18. To current and potential third-party logistics (3PL) services users

Potential third-party logistics services	Not outsourced	Outsourced	Will be Outsourced
Assembly, repair, and packaging			
Bonded warehousing			
Consulting services			
Customs clearance			
Development of distribution strategy/system			
EDI capability			
Expedited delivery			
Export operations			
Export licensing assistance			
Freight bill payment			
Freight charge auditing			
Freight consolidation			
Freight rate negotiations			
Import operations			
Information management			
International telecommunications			
Inventory management			
Intermodal services			
Letter of credit review and compliance			
Management and performance reports			
Order processing			
Order picking and packaging			
Overseas distribution			
Overseas sourcing			
Pickup and delivery			
Product modification			
Product returns and repairs			
Selection of carriers, forwarders, and customs brokers			
Warehousing			

19. Is your company satisfied with its current logistics functions in Borås?

totally satisfied

satisfied

dissatisfied

totally dissatisfied

20. Is your company planning on moving the logistic part of your business from Borås? If yes, where is your company planning on moving?

Yes. It will be moved to.....

No.

21. What will the growth rate of your company's sales turnover be for the next 5 years according to the forecast of your company?

2003..... 2004..... 2005..... 2006..... 2007.....

22. What would you like Borås to be to in the future? (multichoice)

logistics center

commercial and trade center

others (please specify.).....

Your comment

Is there any comment that you would like to give concerning the transportation and logistics of cargo flow in Borås?