ENTERING THE TELECOM INDUSTRY IN JAPAN

- A Case Study of Todos Data System AB -

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ABSTRACT

The current Japanese recession along with pressures from WTO and GATT have forced Japan to open up, and a deregulation process has started in various industry sectors. The deregulation process in the telecom industry has been relatively slow compared to other countries, but along with the global development of the Internet, the Japanese telecom industry has started to change rapidly.

The purpose of this thesis has been to investigate the telecom industry in Japan and evaluate how a small foreign company supplying consumer products can enter this market. As our case company we have used Todos Data System AB, which is a small Swedish company that produces telecom and datacom consumer products.

In order to be able to study what type of entry strategy that Todos can pursue we have briefly investigated the Japanese macro environment and focused on analysing the Japanese telecom industry. Entering Japan normally involves relatively high costs and long payback times. To act as efficiently as possible in the fast-changing telecom industry, a company needs to be committed and goal oriented. Depending on what type of customer to target, we have identified different alternatives for Todos when entering Japan. In these cases, Todos should get assistance from a partner, which could be either an agent or a distributor/trading company. A more long-term alternative is to create a strategic alliance with a telecom manufacturer for knowledge exchange and thereafter jointly develop products.

Keywords:
Japan, Telecommunication, ISDN, Industry Analysis, Establishment Strategy
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INTRODUCTION
1 INTRODUCTION

In this chapter we intend to present the background information in order to give an overall picture of the research problem and the purpose of the thesis. Moreover, we will present definitions of some important concepts in the thesis, as well as a presentation of our case company and our delimitations.

1.1 Background

A common opinion is that the Japanese market is complex and difficult to enter. At the same time, it is a vast market and if a company manages to establish itself, there are huge market potentials. Japan is the world’s second largest economy and represents 70% of the entire Asian economy.¹

At the moment, many Swedish companies are very successful in Japan. During the last years, the Swedish export has doubled and today Sweden is one of relatively few countries that has a trade surplus with Japan. A possible explanation for this is that foreign small and medium sized companies, with competitive products, have a historical chance to break into the Japanese market at the moment. The Japanese industry is in a restructuring phase and is much more open towards foreign suppliers than before.²

The telecom industry is an important part of the current information era. Along with the development of Internet, the global telecom industry has experienced a rapid growth. Higher capacity and speed of communication are demanded, which has resulted in the emergence of new services and new techniques. Countries throughout the world recognise the need to develop a sophisticated telecommunications infrastructure in order to compete in the global economy.

² ibid.
1.2 Problem Analysis

In the following section we will discuss the reason for our choice of subject and the process of constructing our research problem.

There have been plenty of academic studies conducted about Japan. However, continuous investigation of the telecom industry is required since published material quickly becomes out of date. The reason for this is that today the telecom industry is growing and changing rapidly. The prerequisites on which actors competed a couple of years ago are no longer the same, and in a five-year perspective the situation in the industry will certainly have changed from how it is today. An ongoing deregulation process in Japan, in combination with the current recession, has the result that the country is forced to open up towards other countries in order to be competitive on world markets.

The dynamic, continuously changing nature of the industry makes the telecom industry a topical field to investigate. Furthermore, Japan’s deregulation process seems to influence the telecom industry globally as the world’s largest actors think it is important to be at the forefront on the vast Japanese market.

With the strong internationalisation of small and medium sized companies, a relevant problem is what these companies should do in order to enter Japan. For companies with their home markets in small countries, successful business is often synonymous with managing successfully in export markets. Small companies, that have an established presence on their domestic- and neighbouring markets, often see a possibility of establishing themselves on distant markets. Supplying consumer products is often associated with certain specific considerations due to different consumer preferences in various countries. A small company that wishes to enter a distant market is faced with different considerations from a large company, since it does not have the same resources to establish a presence. For instance entering a market with a direct investment is often excluded.
Similarly, small companies tend to fail more often when they move into new markets. Reasons for this can be insufficient pre-studies of conditions in the country as well as a lack of knowledge of how to compete in a specific industry within the country.

1.2.1 Main Problem
The factors discussed above make it interesting to study the dynamic telecom industry in Japan and how to enter this market. The above reasoning has led to the following main problem:

<table>
<thead>
<tr>
<th>MAIN PROBLEM</th>
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<tr>
<td>How can a small foreign company, supplying consumer products to the telecom industry, enter Japan?</td>
</tr>
</tbody>
</table>

The problem is specific to companies active within the telecom industry. As a result, we think that it is of the outmost importance to understand the industry in order to be able to solve the main problem. The problem is also specific to small companies interested in entering the Japanese market. Small companies usually do not carry a full range of products but are instead specialised in a specific market segment.

1.2.2 Research Problems
In order to solve the main problem there are various aspects that can be investigated. We have identified three research problems, which reflect what we think are the most important areas to investigate. The first area is the Japanese macro environment. We argue that it is not possible to study the telecom industry in isolation. In order to be successful a company also needs a basic understanding of the macro environmental context in the country that surrounds the industry. Understanding the macro environment will give a company a holistic view on what to consider when entering Japan.
The macro environment is defined as environmental forces that may influence the performance of the company either positively or negatively. We will investigate the most important factors from the perspective of what is relevant for the company. Moving closer towards the company leads us to the next research problem, which is the following:

**RESEARCH PROBLEM 1**
How do factors in the Japanese macro environment influence companies entering the country?

The micro environment is defined as the industry in which the company operates and here the emphasis of our study will be placed. The industry comprises different actors and by investigating the structure and development of the industry, we will see whether it is an interesting industry to enter.

The importance of knowing how a company should progress in order to reach the Japanese consumers has led to the third and last research problem:

**RESEARCH PROBLEM 2**
What does the structure of the micro environment look like, and how is the industry developing?

**RESEARCH PROBLEM 3**
Which entry modes are suitable for a small foreign company that wishes to enter Japan?

There are different alternatives for a company that wants to enter a new market. In order to choose the most appropriate one, it is necessary to discuss various entry modes, in order to understand their pros and cons and the difference between them. In this section, we will also incorporate a discussion of various entry challenges and how to overcome these.
1.3 Purpose
We aim to evaluate the potential to enter Japan for a small foreign company supplying consumer products to the telecom industry, and provide a valid base for decision-making considering market entry for this kind of company in Japan. We aim to investigate the specific industry and present one or several alternatives for how a small foreign company can enter the Japanese telecom industry.

1.4 The Case Company

We have chosen to study the problems discussed above by using a small Swedish company as our case company. Todos Data System AB is a suitable company since at present they have their main presence in Europe and Asia and are interested in entering the Japanese market.

1.4.1 Todos Data System AB

Maw-Tsong Lin, who is born Taiwanese and has lived in Sweden for more than 20 years, established Todos Data System AB in 1987. Today the company has 26 employees in Gothenburg, where the R&D of hardware and software is located, See Appendix 1 for an organisation chart. Todos has relationships with partners in Taiwan who manufacture all their products and ship them to Todos’s different customers around the world. The production partners have production facilities both in Taiwan and in China.

Todos is growing rapidly. The turnover was SEK 25 million on the 30 April 1999. This was more than double the turnover they had for the same period last year. At the end of 1999 the turnover was projected to be SEK 40-45 million, and in the end of the year 2000 SEK 150 million.

Todos operations are based on three product groups: data communication, pay phones and smart card terminals. Their main customers are telecommunication companies and banks. Some of their largest customers today are Telenor, Telia, MeritaNordbanken and ICA Handlarna.

About 80% of Todos’s products are sold abroad, and today Todos is present in Sweden, Norway, Denmark, Ireland, Great Britain, Nigeria, Macedonia, China, Pakistan and the USA. They also have contacts and negotiations going on in various other countries all over the world in order to expand their sales. At present, the largest markets for Todos are Norway, Sweden and Great Britain.

1.4.2 Todos’s Strategy
The company’s overall strategy is to develop highly sophisticated custom-designed data and telecom products at competitive prices. This means that they produce tailor-made solutions to meet their customers’ needs. The product strategy is to combine the technological knowledge they have in datacommunication and in smart card techniques, into products that integrate the two techniques.

The strategy that Todos pursues for internationalisation can be divided into three different steps. To begin with they find it important to have a strong home base for their sales, i.e. to develop sales on the Swedish market. The advantages in starting to target the home market are that it is easy to visit customers and increase sales. Furthermore, a strong home market is a strength when going abroad. The second step is to target other Nordic countries, Norway, Finland and Denmark. The third step is to target Europe. Countries of particular importance for Todos are Great Britain, Germany and Spain due to their size and market potential. Today, Todos also considers the Asian countries as being very interesting potential markets. Todos has recently signed agreements with two Chinese corporations for distribution of Todos’s products in China.
Todos’s choice of which country to enter is very much dependent on the size and growth of the ISDN market in the particular country, since their data communication products are based on this technique (see definition of ISDN in section 1.6.1). ISDN services, to which Todos product is complementary, have to be promising and available. Normally, Todos has an agent as their representation in foreign countries.

1.4.3 Todos’s Resources

Through their partner, Todos has access to a large production capacity, which can be upgraded to meet increased demand within a very short time. Todos’s main technological resource lies in their expertise in datacom and smart card solutions and their ability to adapt the products to customers’ needs. For example, the product can be adapted to various telecommunications networks, different standards and to different customer preferences. Another resource that Todos possesses is their ability to have good products, sold at the same price as competitors’, although equipped with extra features.

Today, Todos does not have enough people employed to be able to develop products at the speed that they would like to. Even though the product development is relatively fast within the company, Todos wishes to be even faster in order to gain an additional competitive edge towards competitors, and to be able to take advantage of more market opportunities than the company has resources to do today. In order to meet these requirements, Todos would need to employ more highly educated employees and get more capital. To develop brand recognition is a long process in this industry, and Todos is still a relatively small and unknown company, but with the last few years of intensified marketing strategy in their current markets, the company is becoming more and more recognised in the industry.
1.4.4 Todos’s Product Surf Lite
Todos is interested in entering the Japanese market mainly because of the large market potential that a successful establishment can contribute with. Todos wants to enter the Japanese market by initially selling their product “Surf Lite”, which belongs to their datacommunication products. This is an ISDN telephone with an integrated modem, and can be used for multiple purposes, e.g. telecommunications and Internet. Besides the ISDN service, the telephone has a smart card reader for Internet shopping and home banking. The telephone is upgradeable, which means that the software can easily be upgraded with new functions in the future. The target group for this product is private consumers.

Figure 1.1 The Product “Surf Lite”

Source: Todos’s Homepage: http://www.todos.se/surfliteindex.htm, 990902

1.5 Four Approach Considerations
There are various approaches we can take in order to solve the main problem. One way is to concentrate on the telecom industry in the world and in this way determine how to approach the specific Japanese market. This approach implies that the industry is seen as global without any differences between various countries. If the telecom industry is seen as different throughout the world, a second approach is to limit the investigation of the telecom industry to the specific country; i.e. Japan.
A third way can be to limit the research to the specific product and see how it can be sold throughout the world. This approach requires that it is possible to sell the product in a uniform way in various countries. If it is assumed that the way the product is sold has to be adapted to the specific country, a fourth way is to investigate the specific market for the product in the country.

We believe that it is necessary both to investigate the overall industry in which the company operates, and look deeper into the specific market for the product. Furthermore, we believe that it cannot be assumed that the industry is the same all over the world. The research has to take the factors specific for the country into consideration. The recipe we aim to create for Todos is how to sell their ISDN product within the telecom industry in Japan.

1.6 Definitions

In the following section we will present definitions of two important concepts, ISDN and the industry where Todos operates.

1.6.1 Integrated Services Digital Network (ISDN)

Integrated services digital network (ISDN) emerged in the early 1980s as a technology for transferring information, and now it has started to penetrate markets around the world with its ability to transfer much information through several channels at a relatively high speed. ISDN is designed to replace the standard telephone system (analogue lines) and provide a wide variety of services. The advantage with ISDN is its ability to transmit large amounts of data at a higher speed than conventional telephone lines and it is therefore highly suited for the Internet and data communication. An ISDN line can transmit voice, data and images at a top speed of 64kbps (kilobit per second) per channel. Furthermore, it offers two channels,
providing a possibility to receive telephone calls and have access to the Internet simultaneously.4

1.6.2 The Industry

A large part of the thesis is based on the industry where Todos is active, and we will therefore clarify what we mean by the term industry, and which industry we are referring to in the thesis. According to Grant, drawing boundaries around industries and markets is a matter of judgement that must account for the purposes and context of the analysis.5

The industry where Todos is active is complex to define, since it is characterised by technical turbulence where new techniques quickly replace old ones and different technical solutions compete at the same time. Today, there exist different solutions for transferring information and the telecom industry is gradually becoming merged and integrated with computer communication (datacom). Some people even argue that newborn data networks can supersede traditional telecom networks in the future. Furthermore, it is a trend that the telecom, data and media industry are merging to a combined industry: the infocommunication industry.6

Since Todos supplies many different types of products, which combine telecom and datacom for information transfer, the company is active in the telecommunication industry, which today can be seen as comprising telecom and datacom services. Todos supplies telecommunication equipment, and their product Surf Lite is a consumer product, used together with ISDN services. Therefore, the relevant market to look deeper into is the ISDN market for private consumers in Japan. Todos’s ISDN products can only be used if there is a demand for ISDN subscriptions.

Hence, the telecom industry with focus on the ISDN market is the industry on which we will base the thesis.

1.7 Delimitations

The telecom industry is large and complex, and therefore we have chosen to delimit our study to only deal with one country; Japan. The reason why we have chosen to investigate the industry in Japan is that we assume that there still exist differences between different countries within this industry. Furthermore, we have delimited our study to only comprise those factors in the macro environment that influence operations in the industry.

Since Todos initially wants to enter the Japanese market with the ISDN telephone Surf Lite, we have concentrated on this product and excluded their other products from our research, i.e. the pay phones and smart card terminals.

A special focus will be on the particular market for ISDN services, since the case company’s product (Surf Lite) is a niche product within the telecom equipment segment that requires availability of ISDN services in the country. The telecom equipment segment is very broad and a choice of focusing on this segment would therefore be misleading.

In certain parts of the thesis, we have found it necessary to look into technological and financial issues, but we have in general tried to keep a discussion of these aspects to a minimum.

The focus of our research will be on the present situation and we have excluded making predictions or scenarios.
1.8 The Outline of the Thesis

This thesis has seven chapters that together will solve the stated problem and fulfil the purpose. This is summarised in the following figure.

Figure 1.2 The Structure of the Thesis

Source: Own
CONCEPTUAL FRAMEWORK
2 CONCEPTUAL FRAMEWORK

In this chapter, we discuss the theories and approaches, which constitute the conceptual framework of our thesis and upon which we have built our research model. We start by describing the Institutional Network Theory used for analysing the Japanese macro environment. This is followed by a presentation and discussion of an own model for analysing the industry. To conclude this section, challenges when entering a new market as well as different entry modes are presented. These different theories lead to a research model on which we will build our study.

2.1 The Institutional Network Theory

The “Institutional Network Theory” is created by Jansson in order to analyse different countries’ environments and to relate them to the international strategies of a company. The theory was originally constructed for multinational companies (MNC’s) operating on emerging markets, but the theoretical framework can be modified and thereby be applicable to all types of companies and countries. The main advantage of using an institutional approach, compared to environmental analysis normally found in strategic textbooks, is the greater possibility to penetrate the environment in depth and gain knowledge of how it influences the company. Jansson argues that today, when the difference between companies in technical and functional skills is shrinking, the importance for a company to adapt to the external institutional set-up becomes greater.7

2.1.1 Networks and Institutions

The external environment of a company, active on an international scale, consists of a multitude of economic and non-economic actors and factors, which are referred to by Jansson as institutions. Institutions have some characteristics. They have a rule-like or organising nature and they facilitate and constrain the relationships between individuals and groups.

Furthermore, they are signified by predictability; their behaviour is repeated over time, which makes them rather stable. All institutions together constitute the external institutional set-up of a company and how successful a company will be in its operations in a given country will be a function of how well it adapts to the characteristics of the business environment. Below is Jansson’s example of institutions that could be included in an environmental analysis.

Figure 2.1 The Networks Institutions Model

The external set-up of institutions is separated into two fields, societal sector and organisational fields. The company participates directly in the organisational fields and the interaction between the institutions is a two-

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8 Jansson, 1999, ch.1, p. 4.
way one. In the societal sector, the company does not participate directly and the influence is one-way, from the institutions to the company.⁹

In the centre of the model is the network between the company and some of its major external parties on the product and service market. The company and its network actors on the market are influenced by institutional structures (“macro rules”) in the societal sector. The institutional context of a market facilitates or hinders the implementation of a certain strategy.¹⁰

2.1.2 Modified Institutions Model
The network institutions model can be modified and thereby be applicable to other markets. In our approach the institutions are viewed from the perspective of our case company, surrounded by various institutions influencing it. Considering the purpose of our study, the most relevant institution to investigate in the organisational fields is the product and service market, i.e. the industry. The focus of the thesis will be on this part, and we have therefore devoted a separate section in the thesis to making an industry analysis (see section 2.2).

The figure below illustrates our modified model of the institutions in the societal sector. Only those institutions in the macro environment that we think are of importance and relevance for the purpose of our research are included. These are the country culture, the political system, the economy, the infrastructure and the legal system. This model will constitute the base when we make our environmental analysis of Japan.

¹⁰ ibid, p. 10.
Figure 2.2 The Modified Networks Institutions Model

Source: Jansson 1999, ch. 1, p. 10, figure 1.2, modified

The *economy* in a country is important to consider since this determines the country’s prosperity and ability to purchase. Economic indicators can include: the stability of the economy, the relative levels of inflation and exchange rates.

In the *political* sector there are some characteristics of the government and the political system that are of interest to the company. The government consists of ministries and authorities, which share common frames of reference and ways of acting.\(^\text{11}\)

Within the *legal* system it is important to investigate the distinction between formal and informal rules. Formal rules include political and judicial rules, economic rules and contracts. Informal rules are broadly viewed to include codes of conduct, norms of behaviour, and conventions.\(^\text{12}\)

*Culture* is a very important institution to understand in order to do business in a country, since it is influencing every aspect of life. On the other hand,

\(^{11}\) Jansson, 1999.
\(^{12}\) Ibid.
this makes the culture concept difficult to grasp since almost everything in a country can be classified as part of the culture. The focus of our study of the Japanese culture will be on how it influences the business life.

The infrastructure is an important institution to look into, since the industry that we are focusing on in our thesis is the telecom industry. The relevant part of the infrastructure in our thesis will then be the telecom infrastructure.

The institutional approach to environmental analysis is divided into four stages: the identification stage, where major institutions are identified (made above); the descriptive stage, where they are described more in detail; the explanation stage, where the influence of the identified institutions is studied; and the prediction stage where the reproduction of the institutions into the future is analysed.\(^{13}\) When analysing the Japanese Macro environment we will mainly focus on the identification, description and explanation stages. Predictions of institutions will not be incorporated since this is not in line with the purpose of our study, where we instead aim to focus on the present situation.

### 2.2 Industry Analysis

An analysis of the industry makes it possible for companies to understand the arena where different companies compete and is often used as a base and starting point for decision-making in matters that are of critical importance. This is a good way to gain better knowledge of the market and the structure of competitors, suppliers, distributors, customers, and customers’ customers. Hence, an effective industry analysis makes it possible to discover key success factors and sources of competitive advantages in the industry. All these factors influence what type of strategy can be successful among competitors.\(^{14}\)

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2.2.1 The Lack of a Relevant Industry Analysis Model

Karlöf argues that in today’s fast-changing environment industries are not static, but instead develop and expire dynamically. In our opinion, this development makes it unsuitable to use traditional models of industry analysis in order to analyse the telecom industry in Japan. Analysing a fast-changing industry makes it necessary to use a new set of analytical tools.

The most common traditional model to use when conducting an industry analysis is Porter’s “Five Forces of Competition Framework”. This model shows that the profitability of the average firm in an industry depends upon five factors: rivalry among existing firms, threat from potential entrants, threat from substitute products, bargaining power of buyers and bargaining power of suppliers. In our opinion this traditional model provides a static picture and does not take into account the dynamics that influences and determines the development of fast-changing industries. Furthermore, we do not think that the actors identified by Porter are the most important aspect when analysing the telecom industry in Japan. Instead, we want to focus on what determines the structure in the industry, how it is developing, and on investigating the specific market that a company wants to establish a presence within.

2.3 Research Model for Industry Analysis

We have constructed our own model for the investigation of dynamic industries by combining various existing theoretical models with other factors that we think are of importance. In dynamic industries, there are dynamic forces and in order to be able to understand the industry as a whole, an investigation of what causes the market dynamics is necessary. Our point of departure has been to create a model that takes into consideration the different aspects that influence the market dynamic conditions in an industry.

15 Karlöf, 1996, p. 68.
16 Porter, 1980.
Our view is that the industry also influences what happens on the market level and therefore the model takes into account the arena where the specific company will do business, i.e. the specific market.

The model’s purpose is to help understanding dynamic industries, i.e. understand the business logic in these fast-changing industries. The theory is especially applicable to the telecom industry, but the aim is that it should
also be valid for analysing other dynamic and fast-changing industries. The model aims to be flexible and what to investigate in each box can be varied according to the specific purpose of the study.

The model will be especially applicable to small companies, which do not have the size to influence the industry development. For them, it is important to identify the most powerful actors that lead the way in the development.

2.3.1 The Industry Logic Concept
Karlöf argues that the industry logic is of fundamental importance to understand in order to operate successfully in an industry. Our model aims at giving an understanding of the industry logic in the telecom industry in Japan. This is illustrated by positioning the industry logic box in the bottom of the figure above.

According to Karlöf, there does not exist any widely accepted definition of the term industry logic. The scope of the concept can therefore vary with respect to the needs of a specific company. A common definition of industry logic is that it constitutes the necessary concerns which are of decisive importance for success within an industry. Karlöf argues that this is an excellent tool when trying to understand the key factors for success in the industry. In simpler terms, industry logic is the understanding of a certain industry and how actors think and behave, which is vital in order to know how to navigate in the industry.17 The industry logic differs between different industries and different countries.

2.3.2 Market Dynamics
Central in the model is the concept of market dynamics, which has to do with the speed of change, something that can differ between various industries. Market dynamic conditions in an industry influence the pace of

innovation and upgrading. Dynamic industries are constantly in a state of change. In high technology industries, new techniques quickly replace old ones and different technical solutions compete at the same time.\textsuperscript{18} This puts great demands on companies active within this industry, and in order to survive it is vital to have competence to continuously follow up the changes within the industry. The dynamics in the industry is influenced by the industry structure today, as well as the industry development. The specific market also has a limited influence on the market dynamics. In turn, the market dynamic conditions influence all these factors.

2.3.3 Industry Structure

In order to understand the industry, it is important to understand the industry structure. The industry structure is those factors, which determine the type and intensity of competition within the industry. It is the competitive situation and organisation between the industry’s actors, as well as the development of the industry up to today’s date.

In order better to understand the dynamic forces in the industry it is fruitful to draw a strategic map. In the picture below the companies’ degree of internationalisation is put against their product range. Companies in the different groups have different influence on the international industry development.\textsuperscript{19} We aim to identify the various actors and what the structure looks like in order better to understand the industry.

\textsuperscript{18} Sölvell, in Söderman (ed), 1994.
\textsuperscript{19} ibid.
2.3.4 Industry Development

By understanding how an industry develops, companies can formulate strategies that are suitable for that particular industry.

*Trends* influence the development of the industry since they change the environment in which business is done. The demands put on companies and the skills needed to achieve success will therefore also change as a result of the trends.\(^{20}\) It is important to have knowledge of the trends in the industry in order to be able to predict the future prerequisites for competitive advantage. Trends indicate how the industry will develop in the future.

*Driving forces* in an industry determine the development of the industry and can be defined as the reasons for change. In fast-changing industries, where the future is difficult to predict, it is of importance to identify the driving forces in order to better understand the dynamics within the industry.

An important aspect to consider in dynamic technological industries is different *substitute technologies* that can either act as a threat or an

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\(^{20}\) Chartered Institute of Marketing, 1995.
opportunity for a company. These have an impact on the critical process of product planning, i.e. to determine the optimal time to invest and launch a product with a certain technique. If the company launches its efforts too soon, it will suffer unnecessarily through the painful and expensive lesson associated with deploying an immature technology. On the other hand, if the company delays action too long, it runs the even greater risk of being left behind by competitors that have succeeded in making the technology work to their advantage.21

2.3.5 The Specific Market
Markets within the investigated industry are important to examine more closely, and in particular the specific market that the company wants to enter. The market is an abstract term that can be used as a collective concept for a group of customers. The factors that unify these customers are either the geographical location or the needs that create demand.22 Sometimes there may be problems of defining the boundaries of the market. In our thesis we have defined the market as the ISDN market in Japan (see section 1.6).

McKinsey Company and General Electric have developed a method in order to determine the industry’s attractiveness. This concept is aimed to evaluate the company’s possibilities to succeed on a specific market. Industry attractiveness depends on size, market growth, market width, price setting, and structure of competitors, industry profitability, role of technology, social role, environment conditions and legal barriers. 23 The aim of our thesis is to investigate the ISDN market in Japan and the most important aspects to look deeper into are the market size, market growth and price settings.

23 ibid, p. 139.
2.3.5.1 Life Cycle

The ISDN technique can be analysed by investigating its life cycle in the investigated country. Today’s modern techniques have reached different stages of development in different countries. Understanding the life cycle can significantly ease the problem and act as a base when deciding when to launch a product with a certain technique (the ISDN technique). Life cycles can be illustrated as a sales curve, which goes from the technology’s introduction to its elimination from the market.²⁴

Figure 2.5 The Life Cycle

![Life Cycle Diagram](image)

Source: Grant 1998, p. 243

In the introduction stage sales are small, the rate of market penetration is low and customers are few, because the technology’s corresponding products and services are not well known on the market. The novelty of the technology and lack of experience mean that costs and prices are high, while quality is often low. The growth stage is characterised by accelerating market penetration as product technology becomes more standardised and prices fall. In the maturity stage the market goes into saturation and growth is slowing down as new demands give way to replacement demand. Finally, as the industry is challenged by superior

²⁴ Grant, 1998.
substitute technologies, which are replacing the old ones, the industry has entered the *decline stage*.\(^{25}\)

### 2.3.6 Market Actors

According to Karlöf, the industry *structure* (described above) is the teamwork and the dynamic forces among the following actors in the industry: suppliers, customers, competitors, substitutes, society’s influence and establishment and resignation.\(^{26}\) For our purpose, the specific actors that are important to investigate are those involved in the specific market, namely the competitors, customers and intermediaries. The suppliers in the industry are excluded since our case company will not change its supply base if it chooses to enter Japan.

#### 2.3.6.1 Competitors

Each firm should consider its own size and industry position compared to those of its competitors. Large firms with dominant positions in an industry use certain strategies that smaller firms cannot afford. Small companies can instead develop strategies that give them better rates of return than larger companies enjoy.\(^{27}\) Our intention is to identify which the competitors of our case company are.

#### 2.3.6.2 Intermediaries

Intermediaries are companies that help other companies promote, sell and distribute their goods to final buyers. Intermediaries include wholesalers and retailers and frequently these organisations have enough power to dictate terms or even shut manufacturers out of large markets.\(^{28}\)

In order to understand the organisation and activities of the intermediaries it is important to describe the distribution system for the specific product in detail. This involves identifying various types of intermediate actors. The

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\(^{25}\) Grant, 1998.
\(^{26}\) Karlöf, 1988, p. 38.
\(^{27}\) Kotler, 1994.
\(^{28}\) Kotler, 1994.
\(^{29}\) ibid.
power of various actors can be analysed according to how the profits are shared in the distribution chain.\textsuperscript{29} We aim to investigate the Japanese distribution system for ISDN-products.

\section*{2.3.6.3 Customers}
A company must study its customers in order to identify which customers to target in the specific market. According to Kotler (1994), private customers consist of individuals and households that buy the goods for personal consumption. Industrial customers consist of companies and organisations buying the goods or services for further processing, and resellers buy the goods and services to resell at a profit. Each customer type has special characteristics that call for careful study.\textsuperscript{30}

On some industrial markets or reseller markets, a producer might sell to a small number of key customers. The performance of these customers would therefore be of importance to the producer. We aim to identify our case company’s potential customers and describe their operations in order to investigate how they can be reached. The end consumers will not be analysed directly, but their preferences and demands will be taken into account as they have an influence on how the company’s products will be perceived in Japan.

\section*{2.4 Entry Challenges}
Entry barriers are a result of different conditions within the particular country and can be divided into three broad categories, namely formal entry barriers, entry barriers for establishment within a particular industry, and non-formal entry barriers.

\subsection*{2.4.1 Formal Entry Barriers}
Formal entry barriers are normally set up by the government of a particular country in order to protect the domestic industry. Examples of formal entry

\footnotesize{\textsuperscript{29} Jansson, 1994.  
\textsuperscript{30} Kotler, 1994.}
barriers are tariffs on imports, import quotas, and subsidiaries for domestic production. There might also be extensive regulation concerning standards and other requirements that products have to fulfil in order to be allowed for import into the country.\textsuperscript{31}

\textbf{2.4.2 Barriers for Establishment}\textsuperscript{32}

Barriers for establishment in an industry make it difficult for a new entrant to gain a foothold. Barriers for establishment can be categorised as follows.

In some industries a substantial investment might be required in order to enter. When \textit{capital requirements} are high, the barrier against new entrants is strong, particularly when the investment is of high-risk.

If significant \textit{economies of scale} can be obtained by producing above certain volumes of output, existing companies in the industry will have a big cost advantage over new entrants, provided that they already achieve the economies of scale themselves.

Existing companies in an industry can have built up \textit{product differentiation} by an established brand image and strong customer base. This creates a barrier to entry, because new entrants would have to spend heavily to overcome the existing brand loyalties and to build up a brand image of their own.

\textit{Switching costs} refers to the costs that a customer has to pay to switch from one supplier's product to another's. The costs are not just financial: time and inconvenience are also costs in this context.

In some industries existing distribution channels can be hard to gain access to or new \textit{distribution channels} can be difficult to establish.

\textsuperscript{31} Chartered Institute of Marketing, 1995.
\textsuperscript{32} ibid.
Existing companies in an industry have other cost advantages over new entrants, than economies of scales. These could include the following: patent rights, experience and know-how, government subsidies and access to sources of raw materials on favourable terms.

2.4.3 Non-formal Entry Barriers
Non-formal entry barriers are barriers that are not established by the government but still might block the possibility for a foreign company to enter a new market just as effectively as any rules or regulations. Non-formal entry barriers could be, for example, a sensitive and unique character of customers and consumers making their preferences very special. Often non-formal entry barriers could be more difficult to identify, understand and overcome than formal entry barriers.

2.5 Entry Modes
Once a company has decided to sell in a foreign country, it must determine the best mode of entry. It is possible to generalise the ways of entering a foreign market into three broad categories: indirect export, direct export and direct investment. This is illustrated in the following figure where the categories are divided according to the degree of involvement.

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33 Chartered Institute of Marketing, 1995.
Furthermore, each succeeding category encompasses more commitment and risk, but also more control and potential profits.\(^{35}\)

### 2.5.1 Indirect Export

Indirect exporting occurs when a company’s goods are sold abroad through independent middlemen, e.g. domestic-based export merchants or agents. Indirect exporting involves low investment because the company does not require an overseas sales force or a set of contacts. It also involves less risk, and since the middlemen bring know-how to the relationship, the seller normally makes fewer mistakes. This entry mode involves limited engagement from the company and is therefore not a suitable entry mode if a company has a more long-term objective when entering a country.\(^{36}\)

### 2.5.2 Direct Export

Direct exporting occurs when the producer’s organisation performs the export tasks itself instead of using an intermediary in their home country.

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\(^{35}\) Kotler, 1994.  
\(^{36}\) ibid.
The investments and risks are somewhat greater in this strategy compared to indirect export, but so is the potential return.  

2.5.3 Direct Investment
The largest involvement in a foreign market is done through direct investment. Direct investment involves mergers, acquisitions, joint ventures and wholly owned subsidiaries. Initially, these might not be relevant entry modes for small companies, as they require huge amounts of investments. The risk involved in these entry modes is higher and there are several legal aspects that companies need to take into consideration.

2.6 Investigated Category of Entry Modes
When considering the above-mentioned forms of entering a foreign market, the category direct export is relevant for our case company. The reasons for this are the following. Since our case company wants to have control over its establishment, it is not appropriate to use indirect exporting and the fact that the case company is a rather small company excludes going into Japan by direct investment. A company can carry out direct exporting in several ways, which are illustrated in the following figure.

Figure 2.7 Relevant Direct Export Options

<table>
<thead>
<tr>
<th>DIRECT EXPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Export Department</td>
</tr>
</tbody>
</table>


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38 ibid.
Other forms of direct export are exporting consortium, franchising, freight forwarder, technical co-operations, management contract and foreign piggybacking. These forms are excluded in our thesis and not described in any further detail. The reason for this is their lack of relevance when considering the type of products that our case company has. We aim to evaluate the pros and cons for each specific entry mode in the figure above concerning the establishment of our case company in Japan.

The first box in the figure above is *domestic export department*, which some companies establish in their home country in order to handle their exports directly to customers abroad.

A company can choose to have its own representation in an overseas market, by *sending home-based people abroad*. This can either be for starting up purposes for a limited time period, or in order to start a permanent representation. The simplest form of permanent representation in the market is a single employee from the company stationed in the particular country. A more advanced form of representation is to open a *branch office*. How to choose the most suitable form depends upon circumstances in the particular country.

An *agent* is hired by a company to arrange a sales contract between the exporter and a customer. Agents never take the ownership of the goods; instead they sell the products for a commission. Some agents merely arrange sales; others hold stocks and/or carry out servicing on the exporter’s behalf.

*Distributors* are customers with rights to buy and sell a range of a firm’s goods in a specific geographical area. Distributors buy the goods and resell...
them. They earn a profit from adding margins. Trading companies are a certain type of distributor. The producer can use the trading house’s market knowledge and contacts but does not have to bear the responsibility of financing the export transaction, suffer the credit risk, or prepare export documentation.

An international strategic alliance is a long-term collaboration between two or more companies that combine their core competencies to build global competitive advantages. The term strategic alliance is often used for many different types of cooperation, such as marketing agreements, supply agreements, R&D agreements, licensing agreements and joint ventures. Hence, alliances can involve both export and investment agreements, but are categorised as direct export in figure 2.7 since those forms that are relevant for a small company are those that do not involve direct investment.

43 Chartered Institute of Marketing, 1995.
44 ibid.
46 Bell, 1996.
2.7 The Structure of the Master’s Thesis

The picture below illustrates the research model of the thesis, which is the result of the different theoretical parts discussed in this chapter. The model defines the relationship between the macro environment and the micro environment, which are combined and together form the base for what type of establishment strategy that is suitable for a certain company. The model highlights the areas to investigate, and the size of the micro environment box illustrates that the emphasis of our study will be on this part. The research model acts as a starting point for the next chapter’s discussion of how to make our study.

Figure 2.8 Our Research Model

![Research Model Diagram]

Source: Own
METHODOLOGY
3 METHODOLOGY

In this chapter we will describe various methods used in research. The purpose of the chapter is to explain the method that best fits our purpose. We discuss and give reasons for our course of action and the chapter will give an idea of how our study has proceeded. Finally, the validity and reliability concept is discussed in order analyse the quality of the data.

3.1 Research Design

We aim to evaluate Todos’s potential to enter the Japanese market. This is the starting point for our discussion of our choice of research method.

According to Yin (1994), there are five types of strategy for research: experiment, survey, archival analysis, history and case study. Each strategy has various advantages and disadvantages, but what distinguishes the strategies are mainly three conditions: the type of research questions posed, the extent of control an investigator has over actual behavioural events and the degree of focus on contemporary as opposed to historical events. Depending on what the researcher wants to investigate, he has to determine which research strategy best suits the purpose of the study.

3.1.1 The Case Study Method

Case studies are suitable to use when “how” and “why” questions are being posed, when the researcher has limited control over events, and when the focus is on a contemporary phenomenon within some real-life contexts. The findings of a case study should be able to generalise. Our main problem is defined as “How can a small foreign company, supplying consumer products to the telecom industry, enter Japan?” This is a how-question, taking into consideration a present phenomenon in the telecom industry, which as researchers we have limited control over. Hence, we have chosen to use a case study as the method for this thesis.

47 Yin, 1994.
3.1.2 How we Selected Todos as our Case Company

After having studied the Asian region in several courses during the first year of our Master’s program, we developed an interest in this region and in the academic phenomenon of companies growing by establishing themselves in new markets. Due to the fact that much of our previous studies had concerned companies operating in industrial markets, we wanted to focus on a company that was active within a consumer market.

Through the university, we got in contact with the company Todos Data System AB. The company is active in Sweden and on various international markets. Todos wanted to get help from the school to investigate whether there is a market for their products in Japan, and how they should do in order to enter the market. The problem that Todos is facing was relevant for our area of interest and we started to have regular meetings with Todos at its office in Göteborg. The aim of the first meeting with the CEO Maw-Tsong Lin, the Sales and Product Manager Per Skygebjerg and the International Sales Representative Emma Nordlund, was to determine what kind of problem the company wanted us to study.

It turned out that Todos had limited knowledge of the Japanese market and that our first task was to make a brief pre-study and collect facts about whether the ISDN service existed at all in Japan and if it did, what had been its growth in the recent years.

We saw that the ISDN market is developed and growing in Japan and this indicated that the Japanese market is very interesting to Todos. Subsequently, we presented a suggestion of the areas to investigate for our thesis, which were approved by Todos. In order to solve the problem for Todos, the case study should incorporate three parts: analysing the macro environment, analysing the particular industry and market where Todos is active, and analysing various entry modes. We decided to focus on the industry since this was the area that Todos was most interested in, and depending on.
3.2 Scientific Approach

3.2.1 Explorative, Descriptive and Explanatory Studies

Kinnear and Taylor divide scientific approaches according to the type of knowledge of reality that the study aims to produce. The approach could be exploratory, descriptive and explanatory.48

When there is limited knowledge within a certain area, an exploratory approach can be used. Exploratory research is common in the initial phase of the research process when the aim is to identify, define and structure the problem. Both secondary and primary sources are commonly used in the exploratory approach and the goal is to develop a hypothesis and propositions for the future.49 A descriptive approach is used when the purpose is to describe the investigated phenomenon. The aim is not to generalise or to make universal hypotheses but rather to study developments and phenomena. An explanatory approach can be used when there exists profound knowledge and well-developed theories within the problem area, and the aim of the study is to explain what causes produce what effect.50

Our limited initial knowledge of the subject itself made us use an exploratory approach in the early stage of our research process. This was made in the form of studying secondary sources, as well as conducting interviews with various experts in different areas, e.g. within the ISDN technique. We also studied different theories in order to construct a model of what was relevant to investigate in the particular industry. After having gained knowledge about the subject, and built a model from which our research was going to be conducted, we used a descriptive approach, when we described the various areas that are important to consider when a small company wants to enter Japan. Finally, we used an explanatory approach

48 Kinnear and Taylor, 1996.
49 ibid.
when we showed how all of our two previous problem areas affect a company’s choice of establishment strategy.

3.2.2 Abductive Approach

The inductive approach is when a theory deals with different phenomena in reality. On the other hand, when the researcher wants to find information that suits the existing theories, the case study is deductive. When a case study is built on new or developed theories as well as old theories, the case study is abductive. 51 Our planning and approach towards solving our problem areas are a combination of theoretical and empirical work, an abductive approach, which is a combination of an inductive and deductive approach. Our work started with the collection of data and material as well as regular meetings at our case company, giving us an idea of what type of theories we wanted to use. When searching for theories, we had difficulties finding a relevant theory for making an industry analysis. We therefore looked for relevant theories out of which we constructed our own industrial theory. Hence, our research is based on an abductive approach.

3.2.3 Qualitative Research

Both qualitative and quantitative research methods aim to give a better understanding of a certain problem. An important note is that the case study strategy should not be confused with qualitative research. Instead, case studies can be based on any mixture of quantitative and qualitative evidence. 52

The result of a quantitative research can be analysed statistically while qualitative research is based on data that cannot be quantified. 53 The purpose of the qualitative approach is to reach an understanding of how different phenomena cooperate and create a whole. We have used a qualitative approach, through conducting in-depth interviews. The reason

52 Yin, 1994.
for this is our desire to reach an overall understanding of the conditions influencing a company when it considers establishing itself in a particular country.

3.3 Case Study Design

Four basic types of research design are relevant for case studies: single case, multiple case, holistic and embedded design. As can be seen from figure 3.1, different design situations may occur through the combination of the different designs in the matrix, all having their different strengths and weaknesses.54

Figure 3.1 Basic Types of Designs for Case Studies

<table>
<thead>
<tr>
<th>Single Case Design</th>
<th>Multiple Case Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holistic-Single Unit of Analysis</td>
<td>TYPE 1</td>
</tr>
<tr>
<td>Embedded-Multiple Units of Analysis</td>
<td>TYPE 2</td>
</tr>
<tr>
<td>TYPE 3</td>
<td>TYPE 4</td>
</tr>
</tbody>
</table>

Source: Yin, 1994, p.39

Yin makes a distinction between the single case and the multiple case design. The single case design includes only one case study and is appropriate when the case represents a critical test of existing theory, when the case is a rare or unique event or when the case serves a revelatory purpose. The multiple case design is used when the same study contains more than one single case.55

54 Yin, 1994.
55 ibid.
A single or multiple case study can have either holistic or embedded design. The holistic approach is preferable if only one unit of analysis is examined. Further, the case study is of holistic design when the theories underlying the case are holistic in themselves or when no logical subunits can be detected. The embedded design is appropriate when the same case study involves more than one unit of analysis.56

Our case study is conducted with an embedded single case design. Todos is our single case company, and is faced with a unique problem. The study is embedded in the sense that it consists of multiple analyses of several units of analysis, such as the macro environment, the industry as well as the specific market.

3.4 Data Collection
There exist two basic forms of data, namely secondary and primary data. Secondary data is previously collected data, with no particular connection to the case study in question. This type of information can include articles, books, Internet sources etc. Secondary sources can be both of external, and internal nature, i.e. coming from inside as well as outside the organisation. Primary data is information gathered for the first time and for the purpose of a specific study. This can be done through respondents, case studies, simulation and experimentation. This type of data collection is done during the latter part of the information collection, when the secondary sources have been penetrated. Normally, the gathering of primary information is more costly but often necessary in order to answer specific questions, which cannot be answered through accessible sources.57

3.4.1 Sources for Secondary Data
For solving our first research problem (the Japanese macro environment), mainly secondary data was used. This choice was made due to the extensive existence of published material about Japan. The external

56 Yin, 1994.
57 Kinnear and Taylor, 1996.
secondary sources that we have used are published literature, Internet sites, brochures, annual reports, publications, and various types of articles. Internal secondary sources have been provided by Todos and include information material, sales brochures, as well as Todos Annual Report.

3.4.2 Sources for Primary Data

Since none of us had any specific previous knowledge about Japan or the telecom industry, we conducted initial expert interviews in Sweden with people that have knowledge in areas related to our subject. These interviews were aimed to give us basic pre-knowledge of our case company, Japan, the telecom industry and ISDN, in particular. These interviews as well as the respondents’ main knowledge contribution are outlined in the following table.

Table 3.1 Nine Interviews in Sweden

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ISDN technique</td>
<td>Mikael von Brömssen &amp; Patrick Strauss, TomAB</td>
</tr>
<tr>
<td>Macro in Japan</td>
<td>Toshiharu Sato, Comtech Corporation</td>
</tr>
<tr>
<td>Macro in Japan</td>
<td>Jörgen Frotzler &amp; Göran Livbrandt, Ministry for Foreign Affairs</td>
</tr>
<tr>
<td>Macro in Japan</td>
<td>Bodil Prising, former trainee at Swedish Trade in Tokyo</td>
</tr>
<tr>
<td>Building Partnerships</td>
<td>Svante Rösman, Impentab</td>
</tr>
<tr>
<td>Our Case Company</td>
<td>Per Skygebjerg &amp; Emma Nordlund, Todos Data System</td>
</tr>
</tbody>
</table>

In addition to these initial interviews, we also visited a seminar at the Rubinen Hotel in Gothenburg, a seminar arranged by a partner matching company, Impentab.

The second and the third research problems were mainly solved by using primary sources through in-depth interviews with key persons in Japan that have knowledge or experience of the studied subject. These persons are either experts in the telecom industry or have experience from companies entering Japan. The following table gives an overview of these interviews.
Table 3.2 Sixteen Interviews in Japan

<table>
<thead>
<tr>
<th>Knowledge in the Telecom Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hirokazu Fukue &amp; Fuki Okada (JETRO), Atsushi Hasegawa (EIJS), Lars Boman (Nippon Ericsson K.K.), Kenichi Tanaka, Masahiro Ikegaya, Shigeki Aihara &amp; Haruhiko Konno (NTT), Yoshiko Nakamura (NHK), Per Hjerten (STATT), Hideki Yagi (CIAJ)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge or Experience from Entering Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnus Råberg (Micronic Data Systems AB), Thord Kyhlstedt (Electrolux Japan), Hans-Bertil Håkansson (Gadelius K.K.), Tommy Kullberg (Sweden Food and Forestry K.K.), Göran Holmquist (Gadelius)</td>
</tr>
</tbody>
</table>

The interviewed persons were chosen because of their experience from Japan, the telecom industry and the ISDN market in particular. We spread the interviews between different companies and organisations that had knowledge about the industry as well as experience from entering Japan. Due to resource and time limitations we limited the research to the Tokyo area. By interviewing other Swedish companies that have entered the Japanese market we could share their experiences of establishment in Japan.

During our field study in Japan we also visited a telecom exhibition (COM JAPAN 1999), where we conducted a minor survey in order to investigate existing competing products on the market. COM JAPAN 1999 is one of Asia’s largest exhibitions in the info communications industry with participating exhibitors from Japan and abroad. We also had the opportunity to visit the NTT Multimedia Centre in Tokyo (Japan’s largest telecom carrier) where we had a guided tour and a study visit in NTT’s Show Room.

3.4.2.1 The Structure of the Interviews

Interviews can be made either in person, by telephone or by mail. The actual interview may take on different forms and can be classified along a spectrum ranging from structured at the one extreme to unstructured at the
other extreme. The structured interviews pose the same questions to all the respondents, while unstructured interviews are more flexible and the questions can be formed and adapted during the interview. Unstructured interviews are useful when the researcher does not have enough knowledge of the chosen topic to ask relevant questions. An advantage of using unstructured interviews is that since the researchers do not use questions specified in advance, they can get more varied information from different respondents. As the researcher obtains more knowledge of the subject, a semi-structured type of interview is preferable.\textsuperscript{58}

All interviews that we have conducted were made in person. During the interviews conducted in Sweden, we used unstructured interviews due to our limited knowledge of the subject. See Appendix 2 for an overview of the areas of discussion in these interviews.

By the time of our interviews in Japan we had gained enough knowledge to use semi-structured interviews. We used in-depth interviews to be able to penetrate the subject. During our field study in Japan, we started the interviews by asking various introductory questions in order to gain an idea of how much knowledge the respondents had within the different fields. After that we could continue from that point. Furthermore, follow-up questions were posed if the respondent was unclear in his/her statement or if we wanted to penetrate the subject further. We used an interview guide as a base when making the interviews in Japan (see Appendix 3), which was based on the microenvironment and establishment part of our conceptual framework. The posed questions were adapted to the specific person and his or her knowledge within the different fields. The interviews lasted from one to one and a half hours. In order to understand all the details a tape recorder was used.

\footnote{58 Merriam, 1998.}
3.4.2.2 How we have interpreted the Findings of our Interviews
The findings in our interviews have been interpreted according to our research model outlined in Chapter 2. Since we have followed the model for our interpretation of the interviews, we have not separated the empirical evidence that we collected from our interviews, from the analysis that we have made according to the model. Chapter 2 presents the macro environment in Japan and Chapter 5 presents the telecom industry in Japan. Chapter 6 is based on the two previous chapters’ findings as well as experiences from our respondents in Japan. Since we promised our respondents anonymity, we are not able to state who said what. This means that when no reference is given in Chapter 5 and when the context does not state that it is our own analysis, the facts are based on the interviews in Japan. In Chapters 4 and 6 we have referred to the interviews as interview, Sweden or interview, Japan.

3.5 Quality of the Research
Validity and reliability are instruments that help the reader test the quality of the information. In case studies, validity and reliability are based on the researchers’ ability to plan the study, their analytical skills and the conclusions drawn.59

3.5.1 Validity
Validity prevails when the result of the research is in accordance with reality. Validity is divided into construct validity, internal validity and external validity.60

3.5.1.1 Construct Validity
Construct validity helps the researcher to establish correct operational measures for the concepts being studied.61 In order to achieve high construct validity we have tried to state and motivate our problem as clearly

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60 Yin, 1994.
61 Ibid.
as possible and we have also developed our own industry analysis model to be able to investigate what we thought was relevant. To overcome the subjective judgements in secondary sources and from respondents, we have tried to look at as many various sources as possible to avoid relying on one source exclusively.

3.5.1.2 Internal Validity
Internal validity shows how well the results from the empirical study are related to reality. Internal validity can only be secured in causal or explanatory studies where certain conditions are shown to lead to other conditions. Internal validity can, however, be used as a measure of validity within the exploratory approach, but then as a measure of how logically the concepts are tied together in the way they are presented.62

Our conceptual framework consists of three parts, which are logically connected. The macro environment concerns factors that are specific to a particular country, which Todos has to take into consideration in order to do business in the country. The micro environment gives an understanding of the industry that Todos is going to enter and has to be taken into consideration in order to know whether the industry is attractive and when the right time to enter is. Establishment strategies are the various alternatives of actions that Todos can choose between. These three parts in the theory are logically connected as they aim to describe various areas that are of importance to look into when a company wants to establish itself in a new market. We have tried to increase the internal validity by using this framework, and by taking a holistic view of the choice of establishment, thus taking into consideration several aspects that might influence an establishment.

3.5.1.3 External Validity

External validity deals with the problem of knowing whether a study’s findings are possible to generalise beyond the immediate case study.\(^63\) Since we made a qualitative study, it is difficult to make any statistical generalisation from this case study; instead the generalisation has to be of a more analytical nature.

Our thesis describes how Todos can do in order to enter Japan. We believe that there is a possibility to generalise the results of this study to also be applicable to companies of similar sizes and with similar types of customers operating in fast-changing industries. However, the fact that we only conducted a single-case study limits the possibility to generalise our results and conclusions. Furthermore, the choice of establishment strategy depends on internal factors in the specific company as well, which we have not studied, and this might limit the possibilities for generalisation of our study.

With Todos as a base, we have developed our own conceptual framework. We believe that the model is flexible and can be modified and useful for companies that want to enter fast-changing industries, since the model is constructed in particular for a dynamic industry.

3.5.2 Reliability

A study has a high reliability if another investigator, who follows the exact same procedures described by an earlier researcher, and conducts the same case study all over again, arrives at the same findings and conclusions.\(^64\)

We believe that the first part of our case study, concerning the macro environment, has a high level of reliability. The facts that Japan has a long tradition of collecting statistics and that it is famous for its market intelligence skills, have resulted in the existence of many open records, and

\(^{63}\) Yin, 1994.
\(^{64}\) ibid.
the secondary data that we have used is easy to check and compare against other sources. The degree of reliability might be somewhat lower in the second part of our case study, since the industry is very dynamic and rapidly changing. This could imply that if someone conducts the same study at a later point in time he/she might arrive at different results. We think that the reliability in the part where we describe and analyse various entry modes is high because it is based on experiences from several companies that have faced a similar situation as our case company. On the other hand, the risk of subjective judgements cannot be neglected.

3.5.3 Possible Types of Errors
When conducting a case study there is a possibility for errors when data is collected and interpreted. In the beginning of our research, we had some problems identifying the relevant industry in which Todos was operating. We tried to solve this by discussing with persons at Todos and thereby we identified the relevant industry as the telecom industry. Todos’s product is used together with the ISDN technique, and at first the technical aspect was difficult for us to understand. In order to get a complete picture of the ISDN market we therefore conducted the interview with ISDN specialists in the beginning of our research.

In our research we used a great number of secondary sources and this is an area where there could be potential errors. The sources we have used might be biased or we might have misunderstood or misinterpreted them. We tried to overcome this potential weakness by using various secondary sources from different authors and cross check important facts.

Concerning our primary sources, there is a possibility that as interviewers we might have influenced the respondents by asking leading questions, depending on our own opinions and previous knowledge. We tried to overcome this risk by using an interview guide with predetermined examples of questions as a base for the discussion.
There is also a risk that we have interpreted the answers from the interviewees in a wrong way. Even though most interviews were made with Swedish people, several of our interviews were made in English with Japanese people. On one occasion, we used an interpreter and it cannot be excluded that interpretation errors may have been made. By recording the interviews and then printing them word-for-word as soon as possible after the interviews, we tried to avoid biased interpretations.

3.6 Summary of the Chapter
By conducting interviews both in Sweden and Japan as well as studying secondary sources and visiting exhibitions and seminars, we have conducted a case study for our case company, Todos, in order to evaluate how they can enter the Japanese telecom industry. In this chapter, we have outlined the research strategy that we have pursued when making our study. In the following chapters, a presentation and an analysis of our findings will be given.
THE MACRO ENVIRONMENT IN JAPAN
4 THE MACRO ENVIRONMENT IN JAPAN

This chapter aims to present the macro environmental factors in Japan that have an influence on the Japanese telecom industry as well as companies that wish to enter the country. The institutions will be analysed by using Jansson’s Institutional Network Theory, and we aim to describe and explain the underlying factors of their characteristics. The results in this chapter are mainly based on secondary sources.

Figure 4.1 Fact Sheet and Map of Japan

<table>
<thead>
<tr>
<th>National name:</th>
<th>Nippon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emperor:</td>
<td>Akihito</td>
</tr>
<tr>
<td>Prime Minister:</td>
<td>Keizo Obuchi</td>
</tr>
<tr>
<td>Area:</td>
<td>377,835 sq. km</td>
</tr>
<tr>
<td>Population:</td>
<td>126 million</td>
</tr>
<tr>
<td>Capital:</td>
<td>Tokyo</td>
</tr>
<tr>
<td>Monetary unit:</td>
<td>Yen</td>
</tr>
<tr>
<td>Language:</td>
<td>Japanese</td>
</tr>
<tr>
<td>Main Religions</td>
<td>Shintoist, Buddhist, Christian</td>
</tr>
</tbody>
</table>

Source: CBS’s Homepage http://www.cbs.infoplease.com, 991129

4.1 The Japanese Economy

The description and explanation of the Japanese economy aim to give the reader a general understanding of how Japan became the economic super power that it is today. The Japanese economy produces 20% of the world’s total output of goods and services and the Japanese market represents around 15% of the world’s total GDP, which is almost three-quarters of the
GDP in the entire Asian region. Japan has an economic strength and a historical stability that no other Asian country comes close to.\(^\text{65}\)

### 4.1.1 How Did the Japanese Economy Become World Leading?\(^\text{66}\)

The Second World War devastated Japan’s economic base, due to Japan’s heavy resources invested in the war. The allied forces occupied Japan and the U.S. came to dominate the reconstruction of the Japanese economy. The Japanese concentration of business power was reduced resulting in more competitive markets.

Over the years a pattern of industrial growth evolved. Firstly, preferences were given to basic industries, i.e. iron and steel, heavy and chemical industries, and power generation. These industries existed before the war and contributed to Japan’s post-war upgrading of the industrial structure. The government financially supported the growth of all three above-mentioned sectors, while eliminating other inefficient industries. Under official guidance, companies had to release resources, i.e. labour and material, for more efficient sectors that supported growth.

Secondly, two groups of industries were prioritised and provided with official stimulus. The first included shipbuilding, trucks and buses, television and radio, rolling stock and optical equipment. The second group of industries was at a higher technological level and comprised consumer electronics, machinery, precision tools, autos, optics, heavy construction equipment, and computer hardware. Development of these sectors contributed a great deal to Japanese growth efforts, particularly the second list of product lines. These priorities have resulted in the Japanese strength in mass-market technologies, e.g. video cameras, semiconductors, advanced colour televisions, computer displays, and luxury cars.

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\(^{65}\) Swedish Trade’s homepage (www.swedishtrade.se), August 16, 1999.

\(^{66}\) Das, 1996, pp. 75-129.
During the 1950s, rapid growth provoked “excessive competition” in Japan, and worked in favour of large companies, which could capitalise on their scale economies. As a consequence, companies that formally belonged to big companies that existed before the war (zaibastu), and which were split in the war, were re-integrated in six groups of *keiretsu*. *Keiretsu* are loose federations consisting of independent companies, clustered around a bank and a general trading company. Cross share holding is common among the members of a *keiretsu*. The stability of long-term inter-company relationships, promoted by the system, contributes to free flows of information, tightly coordinated production schedules, wide dissemination of technology and meaningful long-term strategic planning. The *keiretsu* appeared to be closed organisational systems, which re-concentrated the Japanese business power. But the Keiretsu have allowed Japan to produce quality goods at lower prices, and enhanced its competitiveness on the international markets.

Between 1955 and 1970, Japanese export grew rapidly, and resulted in a doubling of Japan’s share of world trade, from 3.2% in 1960 to 6.2% in 1970. The growth in Japanese exports did not receive a warm welcome in other countries. Japanese companies were accused of dumping prices and unfair trade charges. In particular, criticism came from the U.S. and Western European countries. They argued that the Japanese yen was undervalued, and that the Japanese market was the most difficult market to break into for foreign companies, due to protectionistic tariffs, quota restrictions, exchange controls, capital controls, and administrative guidance.

By the mid-1980s, Japan was recognised as an economic, financial and technological superpower. In 1980 Japan’s share of world GNP was 9% and in 1990 it was 13%. Japan’s status has significant international implications today since its economic strength has a great deal of influence.

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68 *ibid*, p. 77.
This has assigned Japan a meaningful role not only in the Asia-Pacific region, but also in most parts of the world. Today the Japanese industry in many aspects sets the global standard for quality and industrial production. For many companies, this reason is as important as the Japanese market in itself, why to be present in the country.\textsuperscript{69}

4.1.2 What Made the Growth Slow Down?
In the early 1980s the Japanese economy was faced with a dilemma. It had grown so large that its export expansion, which was faster than world trade expansion, was resented and restricted by other industrial economies. Due to international agreements, the yen was appreciated by 92\% against the dollar from 1985-1988.\textsuperscript{70} The end of the 1980s was the time when Japan developed its so-called bubble economy. During this period an economic bubble was blown up, which burst in the beginning of the 1990s.\textsuperscript{71}

4.1.3 The Financial Crisis
While Japan’s long-term economic prospects are good, the country is at present in its worst recession since the Second World War. The economy began to slow down in the latter half of 1991; demand and production began to shrink and the rate of investment recorded a decline.\textsuperscript{72} The banks had in the end of the 1980s allowed borrowings of large amounts of money, and when the bubble burst in the beginning of the 1990s they were left with enormous loans. The securities for these loans declined in value, as shares and real estate lost value. Since the Second World War the government protected Japanese financial institutions from having to compete with new entrants. This lack of competition created too much capacity in Japan’s financial sector and allowed loans to grow uncontrollably for years.\textsuperscript{73}

\textsuperscript{69} Fornander, in Vargö (ed), 1998.
\textsuperscript{70} Das, 1996, p. 102.
\textsuperscript{71} Borg, 1997, p. 128.
\textsuperscript{72} Das, 1996, p. 105.
\textsuperscript{73} Japan Economic Almanac 1999 p. 6.
Real GDP in Japan grew at an average of roughly 1.25% per year between 1991-98, compared to annual growth in the 1980s of about 4%. Growth in Japan in the last decade has been slower than growth in other major industrial nations. The Government has forecast the growth in the Japanese economy to be 0.5% in the fiscal year 1999. A number of economic indicators remain negative, but Japan announced strong growth (1.9%) for the first quarter of 1999. Since 1995, the yen has again appreciated against the U.S. dollar by around 30% main economic indicators for Japan are outlined in the Appendix 4.

The effects of the Japanese financial crisis have been forcing structural changes upon the country. The banks are more careful in their credit approvals than before, and as a result the number of new loans is declining. Since bank loans have traditionally been very important for corporate financing, this has primarily affected small and medium sized companies, which have gone bankrupt since they do not have access to capital at difficult times. The crisis has forced the government to open up the Japanese industry and as a result it has encouraged a deregulation process in many sectors.

4.1.4 Purchasing Power
Japan is an economically prosperous country and people have a very high living standard and strong purchasing power compared to most other countries in the world. The uncertainty about the government’s ability to handle the financial crisis, together with stricter credit conditions, increased unemployment and sinking incomes for households as well as companies, have now led to five quarters in a row with sinking consumption. The recession has also resulted in households having decreased their general spending in favour of savings and there are visible trends of consumers searching value-for-money. On the other hand, many Japanese families

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54 Japan Economic Almanac 1999 p. 56.
55 OECD, July 1999.
56 Interview, Sweden.
are today better off than during the days of the bubble economy, and this depends very much on the historically low base rate of 0.5%. Even if the total ratio of spending has decreased, since 1994 the ratio of household spending on telecom equipment among total household living expenses has been increasing.

4.1.5 Analysis of Economic Implications
The economic development and its current recession affect various industries in Japan, among them the telecom industry and force the Japanese government to open up markets to both domestic and international companies. The government’s incentives and investment have in many ways contributed to the country’s world-leading industries. Even though Japan is in a recession today, they fell from a very high level and the Japanese market has an enormous potential with many potential consumers that have a good purchasing power. Yet the economic recession has led to an increased cost awareness among consumers and Japanese companies. This fact together with the appreciation of the yen have made imported goods more competitive in Japan and have created opportunities for low price competitors to enter the market. Furthermore, as a result of credit restrictions, many companies are now looking for alternative ways for financing and merging or cooperating with foreign companies, or financing their business with the help of stock markets. As a result, companies with competitive products have a unique opportunity to break into the Japanese market at the moment.

4.2 The Political System in Japan
In 1889, Japan established a bicameral parliamentary system, influenced by the constitutions in Germany, France and England. This is the base for the political system that Japan still has today. During the U.S. occupation after the Second World War, an American “democratisation process” influenced

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79 MPT, 1999.
the political system.\textsuperscript{80} The allied occupation of Japan ended in April 1952 and Japan became an independent state.\textsuperscript{81}

The Japanese head of state is the Emperor. His role is symbolic and he provides the Japanese people with an identity and a unity but has no political power. The active government has three branches, namely legislative, administrative, and judiciary. The legislative power is in the hands of the Diet, a parliament composed of a House of Representatives and a House of Councillors, consisting of elected members. The administrative power is within the Cabinet, a body of ministers, headed by the Prime Minister, responsible to the Diet, but supported by a very strong bureaucracy of civil servants. The judicial power is found in the court system, headed by the Supreme Court.\textsuperscript{82}

The party that is currently in power is the LDP (Liberal Democratic Party). The party is a “catch-all” party, deriving its support from business, large and small agriculturalists, professionals and some religious groups. Every second year LDP elects a president, and if the party is in power, he becomes Prime Minister.\textsuperscript{83} The current Prime Minister of Japan, Keizo Obuchi of the LDP, was elected in July 1998. The LDP has been in power in Japan more or less uninterruptedly since the end of the U.S. occupation. Periodic scandals (e.g. a minister committing adultery) have called into question the ethics and integrity of Japanese politics as well as its politicians. This has also created a certain disappointment with the LDP among Japanese voters, but no serious change has emerged and Japan is basically still a one-party state.\textsuperscript{84} The LDP has a substantial control of the Diet and seems to be able to quickly adapt to different outcomes of Japanese elections, so that they are always in control of power. An example of this is that over the years they have cooperated with various opposition

\begin{footnotesize}
\textsuperscript{80} Hendry, 1996, p. 187.
\textsuperscript{81} Das, 1996.
\textsuperscript{82} Hendry, 1996, pp. 188-189.
\textsuperscript{83} ibid, pp. 194-195.
\textsuperscript{84} Jenkins, 1993, p. 68.
\end{footnotesize}
parties. In addition, after scandals, they have put the blame on single politicians and thereby cleared the party’s reputation.⁸⁵

Decisions in the government are taken in consensus, which makes the system complex and slow. As a consequence, the Japanese government is often slow in responding to new trends in the business world.⁸⁶ There have also been complaints regarding the methods by which business is conducted in Japan; sometimes they are described by foreign Japan experts as “institutionalised corruption.” For example, the web of close relationships between Japanese companies, politicians, government organisations, and universities plays an important role in the awarding of contracts and positions, since these are often distributed within a tight circle of local players.⁸⁷

4.2.1 The Effect of Japanese Politics on Foreign Trade
Over the years, Japan has taken a protectionistic stance and firmly controlled imports and managed to keep the domestic market for domestic producers.⁸⁸ The most common problems that foreign companies encounter with respect to the Japanese government’s behaviour include too many regulations and/or administrative guidelines, the taxation and troublesome customs clearance procedures.⁸⁹ Japan has had to pay for this behaviour, since many of its largest export markets put restrictions on imports of Japanese goods. How to overcome this problem has been widely discussed in GATT and WTO, and international agreements have led to an opening up of several sectors on the Japanese market.

The Japanese government, through MITI (Ministry of International Trade and Industry), JETRO (Japan External Trade Organisation), EXIM Bank (Export-Import Bank of Japan) and various other governmental and

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⁸⁵ Moberg & Danielsson, 1996.
⁸⁶ Interview, Sweden.
⁸⁸ Das, 1996.
prefectural entities, is financially assisting foreign companies in Japan. This assistance occurs through various means, such as investment subsidies in target areas or industries, government guaranteeing the obligations of foreign companies that lack the security needed to borrow from private banks, and liberal governmental procurement of foreign-made goods. Another assistance is the revision of the foreign exchange and foreign trade control law in order to make procedures more open and transparent. The government also provides investment-related information, and has established a semi-government-financed business supporting company for foreign investors (e.g. JETRO’s Business Support Centre). Furthermore, there are numerous import expansions plans.90

Japan occupied Taiwan between 1895 and 1945 and since then Taiwan has continued to play an important role for Japan, by providing high-quality goods for the Japanese market and consequently as a site for direct investment by Japanese firms. In 1978 Japan’s formal relationship with Taiwan was discontinued since Japan wanted to improve their relationships with China. This, together with the fact that the Japanese occupation of Taiwan was rather cruel, has lead to a worsened relationship between Taiwan and Japan even though the two countries have a large exchange in trade. Japanese people still tend to think of Taiwan as “their island”, while the Taiwanese see the Japanese as oppressors.91

4.2.2 Analysis of Political Implications

By understanding the political system the behaviour of the government can be understood. The fact that the LDP party practically has had the power since the Second World War indicates political stability. The government has a direct influence on industries and companies in Japan as it handles regulations, and the tendency to implement changes sets the pace and spread of deregulation processes. The fact that the Japanese government has been slow in responding to business changes can be a reason why Japan

91 Encyclopaedia Britannica’s Homepage (www.eb.com), December 9, 1999.
is today far behind in some industries, such as the IT industry. In the past, the Japanese government was accused of protectionist behaviour, hindering foreign companies from entering Japan. However, the pressure from GATT and WTO has forced Japan to open up the domestic market and now foreign companies can even get financial aids from the government in order to establish themselves in Japan. Furthermore, the interrelationships between businesses and the Japanese government imply that the government is an important actor in the business life in Japan. The historical relationships between Japan and Taiwan are also important to take into consideration for companies with a connection to Taiwan.

4.3 The Legal System in Japan

Japan has had a set of written laws since the early eight century. These old laws were considered unsuitable when in the 19th century Japan started to engage in international trade. At this time a new legal system, which as the political system was influenced by France, Germany and England, was constructed. Furthermore, when the influence of the U.S. was strong during the occupation, major changes were introduced.92 Nowadays, laws applicable to conducting business are embodied in the Commercial Code. Laws governing individual interests are embodied in the Civil Law.93

The Japanese believe that once you rely on a business partner, words are enough and no written contract or agreement is needed.94 If a contract is signed, it is viewed as an agreement to have an ongoing, harmonious relationship and to create mutually beneficial business. Detailed legalistic procedures are seen as an unnecessary way of hurting the feelings of a business partner and therefore legal clauses for arbitration, for example is avoided.95 The Japanese place great importance in maintaining social harmony, and therefore it is customary that disputes are solved without

93 Ernst &Young, 1991, p. 89.
94 Interview, Sweden.
seeking legal recourse. Furthermore, a private conflict should be kept private and not solved in public.96

4.3.1 Technology & Patents
Japan has succeeded in absorbing Western technology because of two major reasons. Firstly, Japan relied on foreign engineers who were subsequently replaced by those trained at the domestic universities. These engineers studied foreign technical treaties and actual imported machinery. They copied what they saw and added improvements and modifications of their own. Thus, they were innovative imitators. Secondly, a good deal of R&D (research and development) took place before application and absorption of modern technology. The scale of R&D expanded after the Second World War. In two decades, Japan became immensely sophisticated, which in turn had a great deal of impact on the industrial sector and, therefore the manufacturing in the Japanese industries is very value adding.97

Nowadays, obtaining and protecting patents and trademark rights in Japan can be time-consuming and costly. However, a lack of protection would permit competitors both in and outside of Japan to copy a product or production process. The Japanese can be seen as masters at copying products. They often acquire a Western product, learn how it functions, and then manufacture an improved version themselves. In today’s Japan, patents are not helping very much because the Japanese are experts in ways of getting around them. Within the IT industry, many companies do not take patents, simply because they do not have enough time and resources to engage in a legal process in Japan if someone violates the patents.98

96 Hendry, 1996, p. 211.
97 Das, 1996, p. 89.
98 Interview, Japan.
4.3.2 Analysis of Legal Implications
The legal system sets the formal frame of how to do business in a country and which laws to take into considerations. For a foreign company aiming to cooperate with Japanese companies or enter the country, it is important to understand the context of how business is done. In Japan, there is an opposition against strict contracts and cooperation in business is based on creating relationships and mutual understanding and respect. The fact that the Japanese have a dislike for strict contracts, where the terms of the cooperation might not be clearly stated, can cause insecurity for foreign companies doing business with the Japanese. It is important to be aware of the good technological competence in Japan, which has contributed to their competitive technological industries. This has further implications for a company with a unique product or technique, since it has to be aware that there is a risk of losing the technique, even though the law protects patents.

4.4 The Japanese Culture
Over the centuries Japan has developed its own culture mainly because it is an island, which has been isolated from the rest of the world. After the Second World War, the Japanese have been influenced by the outside world, although they have always kept their own cultural characteristics. This section intends to give a brief description and explanation of these characteristics.

4.4.1 Confucianism
Confucianism was imported into Japan from China and although Confucianism did not survive in Japan as a religion or philosophy, the Confucianistic values were deeply rooted, influencing the economic, social and political behaviour of the people.\textsuperscript{99} The family system, for example, drew much of its strength from the Confucian idea emphasising that stable families, rightly governed, lead to a stable and happy country.\textsuperscript{100}

\textsuperscript{99} Borg, 1997.
\textsuperscript{100} Hendry, 1996.
Behind an enthusiastic Japanese acceptance of modern technology as well as concepts of progress and growth, universalistic principles of ethics, and democratic ideals and values, strong Confucian influences remain beneath the surface. This is expressed in a belief in the moral basis of government, the emphasis on interpersonal relations and loyalties, and the faith in education and hard work.\footnote{Reischauer, 1978.} Confucianism, with its inbuilt striving for harmony, its respect for elders and hierarchical superiors, and its emphasis on the group rather than on the individual can explain the friendly relationships between business and government and between managers and workers in Japan.\footnote{Das, 1996.}

### 4.4.2 Collectivism

Japan is not a nation where importance is attached to single individuals, but rather to various groups. Individual achievements are important, but only because they improve the collective result of the group.\footnote{Borg, 1997, p. 14.} With group-consciousness so highly developed there is almost no social life outside the particular group. The individual’s every problem must be solved within this frame. Group participation is simple and harmonious. Each group or institution develops a high degree of independence and closeness, with its own internal laws, which are totally binding between members.\footnote{Nakane, 1984.}

In Japan, companies often have a broader role than just providing a job for their employees and this is an expression of the collectivistic society. Companies are seen as a second home for many employees, with a sense of social belonging that can be stronger than family ties. Japanese companies sometimes provide housing and social security, but above all it is at work that the Japanese get their identity through the work place’s group orientation and collectivism of the workplace.\footnote{Borg, 1997.}
4.4.3 Consensus

Harmony is something that the Japanese continuously strive for. They do this by a subtle process of mutual understanding, almost by intuition, rather than by a sharp analysis of conflicting views or by straight decisions. The Japanese think that decisions should not be left to any single man, but should instead be taken by consultations and committee work with consensus as the goal. Consequently, one-man orders, regardless of the man’s authority, are resented, and even closed majority decision by vote leaves the Japanese unsatisfied.\[^{106}\]

4.4.4 Hierarchy

Hierarchy permeates Japanese life, i.e. ranking individuals, groups, institutions, material objects and even food. There is no doubt that hierarchical differences affect interaction between Japanese people in their everyday lives. Indeed, in many situations it is difficult to know how to behave unless one can place the other people present in a hierarchical order in relation to oneself. The hierarchical order, affects among other things, how to greet another person, how to speak and how to sit in a room.\[^{107}\]

4.4.4.1 Tattemae and Honne

The difference between tattemae and honne corresponds to the difference between public behaviour and one’s real feelings. Japanese people adjust their level of politeness according to the situation. The Japanese language has quite clear speech levels, which are chosen according to the relationship between the people involved in a conversation, as well as the context in which they find themselves. The use of polite language means that they maintain a certain distance and a protection of the “inner feelings” between the conversants are possible. By choosing the appropriate “face” for a particular occasion, a Japanese person expresses his particular social role in relation to another person.\[^{108}\] This can make it difficult for foreigners

\[^{107}\] Hendry, 1996.
\[^{108}\] ibid.
to understand what the Japanese think in different matters as they do not openly express feelings.

### 4.4.5 Japanese Consumers

The historical separateness of Japan from the rest of the world, and the strong Japanese belief in the uniqueness of their culture and society, have traditionally made Japanese consumer behaviour different from that found in other markets. However, the growing integration of Japan into the world economy, the presence of foreign products and services, and the exposure of Japanese consumers to foreign culture and values through the media or foreign travel, have made Japanese people more open to new influences.\(^{109}\)

This trend is particularly strong among the young generation that has an interest in foreign branded goods, such as clothes, bags, and shoes, e.g. French fashion.\(^{110}\) However, among most Japanese a tendency to prefer Japanese products still remains in some areas, for example in electronics, since this is an industry where Japanese companies have high reliability and are world leading.\(^{111}\)

Japanese people have a holistic view on buying things. Therefore, products are most often sold with a service package, and speed of service is important in Japan. They doubt foreign companies’ ability to offer good service, and this can make consumers choose a Japanese product over a foreign.\(^{112}\) Japanese consumers also expect products to have high quality and appealing design. Japanese customers have very little understanding if a product does not work and a slight miss in the packaging of a product would make them hesitant about the quality. A particular characteristic of Japanese consumers is that they have a preference for products that are small. This can be linked to the fact that Japanese people normally have

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\(^{110}\) Interview, Japan.

\(^{111}\) Ibid.

\(^{112}\) Interview, Sweden.
very small houses and therefore limited space for large products. In addition, they often work much and are therefore seldom in their homes.113

These preferences of Japanese consumers are also reflected among industrial buyers. Some people argue that it is always a disadvantage being a foreign supplier. If Japanese companies were to buy a foreign product they demand that it is better and preferably also cheaper than similar Japanese products. The quality level must be at least the same as for the Japanese products.114

4.4.6 Analysis of Cultural Implications
Culture has an influence on the structure of society and how people think. By having an understanding of Japanese culture, it is easier to understand a Japanese counterpart. Japanese culture emphasises a long-term outlook and the importance of relationships, which makes it difficult for foreign companies to enter the marketplace. The long-term outlook that the Confucian values create in Japanese society can also be seen in business life, where companies have a long-term perspective when doing business, and the payback time on investments is normally long. Japanese people’s fear of losing “face” can make it difficult to understand true Japanese feelings. The Japanese striving for harmony and consensus implies that it can take a long time to reach a decision when negotiating with a Japanese company. The emphasis on loyalties in Japan is certainly a reason for Japanese nationalistic behaviour in some areas. The culture also has an influence on consumers’ preferences, which is important to understand in order to be able to satisfy demand. Satisfying Japanese consumers can be perceived as a demanding task, especially for a foreign company unfamiliar with the culture, and involves delivering high quality products, with a good service deal. Furthermore, foreign suppliers should preferably deliver products that are unique in some sense and at a lower price than Japanese competitors.

113 Interview, Japan.
114 ibid.
4.5 **The Infrastructure in Japan**

Since the whole next chapter will deal with the telecom industry in Japan, this section is rather brief and focuses on the quality of the telecommunications infrastructure in Japan, since this is the relevant part for our case study.

International and domestic communication has traditionally been a prioritised area by the government in Japan. As a result, the Japanese network of telecommunications is very well developed and among the best in the world.\(^{115}\) Today, Japan is among the world leaders in the use of advanced telecommunications, including widespread use of facsimile transmissions and electronic-mail systems.\(^{116}\)

The Government has several telecom infrastructure projects in place, which are aimed to make Japan competitive on world markets for info-communications systems. This contributes to an increase in demand for telecom infrastructure. Investment in telecom infrastructure per year is at present around 3,750 billion yen and by the year 2007 it is forecast to reach 56,800 billion yen.\(^{117}\)

**4.5.1 Analysis of Infrastructure Implications**

The state of the infrastructure is of the outmost importance to consider for a company active in the telecom industry since this is a prerequisite for their ability to do business. The good state of the Japanese telecom infrastructure and the investments made for the future are very promising signs for the communication capabilities in Japan. The government’s incentives and commitment to invest in these fields are important to be aware of for companies supplying products to this industry.

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\(^{115}\) Ernst &Young, 1991, p. 93.


\(^{117}\) MPT, 1999, p. 226.
4.6 Summary of the Chapter

This chapter has illustrated that factors in the Japanese macro environment have an influence on the development of various industries in Japan. The current Japanese recession as well as the government’s decision to open up Japan for foreign companies are examples of factors that have created new opportunities for many companies. Furthermore, Japanese culture is very complex. In order to satisfy Japanese consumers a great understanding and adaptability to the Japanese consumers’ preferences are required. This chapter has created a link over to the next part of our study, which is a presentation of the specific industry into which our case company wants to enter, the Japanese telecom industry.
THE TELECOM INDUSTRY IN JAPAN
5 THE TELECOM INDUSTRY IN JAPAN

This chapter applies the industry analysis model presented in Chapter 2. We aim to describe and analyse the telecom industry in Japan in order to give an understanding of the industry logic. We will do this by studying the industry’s structure as well as its development. Furthermore, the specific market for ISDN in Japan will be analysed with the purpose of determining whether it is an attractive market to enter. The chapter ends with a discussion of different substitute technologies that can act as a threat to the ISDN technique. Where no references are given, the results in this chapter are based on interviews in Japan.

5.1 The Telecom Industry in General

Even though the growth in the overall Japanese economy has been slow in recent years, growth in the telecom sector has been strong. The average annual growth rate in the telecom sector between 1980 and 1997 has been 8.1% and in 1997 the value of Japan’s telecom industry was 12,720 billion yen. The ISDN market in Japan is growing very rapidly with 570 billion yen in revenues in 1998. The growth rate for ISDN subscriptions targeting households and small companies has been 88% on average since ISDN started to grow rapidly in Japan in 1995. Between 1998 and 1999, 1.8 million new subscribers were added. The fact that each of these subscribers bought an ISDN product indicates that there are huge market potentials for ISDN products in Japan.

5.2 Industry Structure

After the Second World War, the telecom market in Japan was divided into two monopolies: NTT (Nippon Telegraph and Telephone Corporation) was

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120 NTT’s Annual Report 1999, (NTT’s operating incomes for ISDN/0.0975, since NTT controls 97-98% of the ISDN market)
given the exclusivity for domestic calls and KDD (Kokusai Denshin Denwa) the exclusivity for international calls. The process of deregulation started in 1985 when the Japanese government took away the two monopolies. At this time, NTT was partly privatised and the government allowed other companies to enter the market. In 1987, new private telecom carriers came into the market and in 1989 international carriers entered the Japanese market.

5.2.1 The Deregulation Process
Since the deregulation process started in Japan several areas of the telecom industry have been deregulated. To increase competition, laws have been eased, but the deregulation process on the Japanese market has not been as drastic as in many other countries. The government has kept some laws and regulations so that they can have the possibility to intervene in the market.

5.2.2 Major Players
In recent years the number of telecom companies operating in Japan has increased dramatically. There are around 10 major operators today for telecom transfer in Japan and numerous smaller actors. These are NTT, KDD, New Common Carriers (NCCs), and foreign-based companies. The number of subscribers with the NCCs is steadily expanding while NTT’s is declining. The major NCCs are DDI, IDO, Japan Telecom (owned by Japan Railways, British Telecom and AT&T) and Teleway Japan (a Joint Venture between Toyota, KDD, DDI and Japan Telecom).122

The Japanese Telecommunications Business Law distinguishes between “Type 1” and “Type 2” carriers, with the former installing and operating their own telecom networks, and the latter providing services with the use of leased networks from Type 1 carriers.123 The following figure states the change in number of different telecom actors in Japan between 1997 and 1998.

122 MPT, 1999.
### Table 5.1 Number of Telecommunications Carriers in Japan

<table>
<thead>
<tr>
<th>Type I Telecommunications Carriers</th>
<th>Fiscal 1998</th>
<th>Change from 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>KDD</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>NTT DoCoMo Group</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>NCCs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-distance/Int. Carriers</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Regional Carriers</td>
<td>77</td>
<td>30</td>
</tr>
<tr>
<td>Satellite Carriers</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Mobile Carriers</td>
<td>73</td>
<td>-11</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>179</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type II Telecommunications Carriers</th>
<th>Fiscal 1998</th>
<th>Change from 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Type II carriers</td>
<td>88</td>
<td>-7</td>
</tr>
<tr>
<td>General Type II carriers</td>
<td>6514</td>
<td>738</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>6602</strong></td>
<td><strong>731</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6781</strong></td>
<td><strong>757</strong></td>
</tr>
</tbody>
</table>

*Source: MPT White Paper 1999, p 116*

Other important players in the telecom industry are electronic manufacturers such as the *telephone maker* Kyocera, who controls DDI, *car manufacturers* such as Toyota, who owns IDO and also has a joint venture (Teleway Japan) with KDD, DDI and Japan Telecom, *railways companies*, such as Japan Railways, and *electronic power companies* such as Tepco. An important characteristic of electronic power companies like Tepco is that they use their existing lines for electrical power to customers’ homes for telecommunication.

Furthermore, the Japanese telecommunication equipment manufacturers are important players since they are part owners of the New Common Carriers (NCCs), although their share is small, ranging from 1-5% on average.\(^{124}\)

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\(^{124}\) Anonymous, September 15, 1996.
5.2.2.1 Access Charges
Through the deregulation, NTT and KDD have been allowed to enter each other’s traditional markets, but NTT and KDD still control more than half of their traditional markets, i.e. the domestic and international market respectively.\footnote{Scott-Joynt, March 1999.} It is important to emphasise that the New Common Carriers (NCCs), do not have direct access to their customers. Some have their own networks, but they have to pay access charges to NTT, who virtually has a monopoly over local networks (the local loops). NTT controls the local loop to 99%. Hence, there is limited competition in the local loops. Instead, NTT and NCCs mainly compete in the long-distance market for calls between prefectures within Japan.

5.2.2.2 Nippon Telegraph and Telephone Corporation (NTT)
NTT is among the largest companies in the world and has a huge influence on the Japanese telecom industry. They account for nearly 90% of total operating profits in Japan’s telecom industry. They have around 60 million subscribers, 90 branches, 260 million network centres, and a yearly research and development budget of approximately 245 billion yen.\footnote{Anonymous, April 20, 1998.}

Originally, NTT was a government body that helped rebuild Japan’s telecom infrastructure after the Second World War, and they used their huge procurement budget to give birth to companies such as NEC, Fujitsu and OKI Electric Industry by letting them supply products. NTT is today owned to 60% by the government and 40% by stocks, but there are plans to privatise the whole company. The NTT Group supplies normal telephone subscriptions, ISDN subscriptions, long-distance and international call services, mobile telephone services as well as software and services for governmental and financial organisations.\footnote{NTT Annual Report 1999.}
NTT is the largest telecom equipment purchasing entity in the telecom sector. Through its research and development and deployment decisions, NTT sets standards that impact the entire Japanese telecom market.

5.2.2.3 Kokusai Denshin Denwa (KDD)\(^{128}\)
Traditionally, KDD has had the monopoly for international calls. As a result of the deregulation in Japan, KDD has been given the go-ahead to enter the domestic telecommunication market. Today, KDD is one of the largest international telephone companies in the world, providing long-distance and international telephone services. KDD has experienced intensified competition when NTT was allowed to move into international telecommunications markets. KDD cooperates with domestic and foreign telecommunications carriers in order to promote the Internet and Intranet businesses between Japan and overseas, within Japan, and between and within countries abroad.

5.2.2.4 DDI Corporation\(^{129}\)
DDI was established in June 1984. As the liberalisation of the telecommunication sector took place, they received the permission to operate as a Type 1 Telecommunications Carrier in June 1985. DDI began to provide leased circuit services (services with hired telephone lines) in October 1986 and long distance telephone services in September 1987. The DDI Group subsequently expanded into cellular phone services in 1989 and PHS services in 1995. In October 1998 DDI began to offer international telephone services through interconnections with KDD, Teleglobe of Canada and Cable & Wireless of the United Kingdom. In November 1998 the company began satellite based global telecommunication operations based on the IRIDIUM technique.

\(^{128}\) KDD’s Homepage (http://www.kdd.co.jp), November 21, 1999.
5.2.3 *Analysis of Influential Actors in the Japanese Telecom Industry*

In the following figure, we have analysed various actors’ position in the Japanese telecom industry and the sizes of the boxes illustrate their relative market influence.

Figure 5.1 The Structure of the Japanese Telecom Industry

Since the deregulation process started in 1985, several New Common Carriers (NCCs) have appeared. Some of them compete on a local level (TT-Net) and others offer a wider product range (DDI). The entrance of new actors has contributed to a creation of strong competition within the Japanese telecom industry. However, as can be seen, NTT still holds an enormous influence in the Japanese telecom industry, together with KDD that formerly had the monopoly on international calls. Companies that want to do business in Japan need to be aware of NTT’s enormous power and the fact that they in practice still have a very strong and close to monopolistic position.

*Source: Own*
5.3 Industry Development

The Japanese telecom industry is in a phase of rapid development and both the use of Internet and mobiles have recently expanded rapidly.

5.3.1 Networks

As a response to huge increase in telecom traffic in recent years, the telecom networks in Japan have been growing. The actors that operate their own networks in Japan are NTT, KDD, DDI and Japan Telecom. NTT and KDD are today investing money in fibre optic cables, which is a new access system with high-speed, high quality cables for transferring information. Many different services, such as ISDN, can be used in these fibres. NTT is investing in a project called “Fibre to the home” (FTTH) for which it is projected that in March 2000, 36% of all Japanese people will have been connected through cables to their homes. 100% will have been connected in 2010. NTT is cooperating with the government in order to speed up the implementation of the nationwide fibre network, so that 100% of the people will have this service as early as 2005.

In April 1999 KDD began the operation of Japan Information Highway (JIH), which is a submarine optical fibre cable network. The cable is linked to domestic and overseas telecommunications networks and has a capacity of 100 Gbps.

5.3.2 Major Trends

It is a common opinion that the future of the telecom industry is very difficult to predict, since the development depends on many uncertain factors. However, there are some specific trends that can indicate how the industry will develop.

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130 MPT, 1999, p. 128.
131 KDD’s Homepage (http://www.kdd.co.jp), November 21, 1999.
5.3.2.1 Increasing Competition
Competition is increasing among carriers in Japan and competition in terms of price is becoming more and more severe. According to MPT’s White Paper 1999, domestic and international telecom charges have been falling in Japan since 1990. Furthermore, competition is becoming more severe between mobile carriers and fixed line carriers.

5.3.2.2 Globalisation and Standardisation
As globalisation of info-communications increases, standardisation has become increasingly important, not only in securing interconnectivity and interoperability, but also in developing new markets and providing conditions for competition.\(^{132}\) Since many corporate companies are active worldwide, the telecom carriers are today driven to become global in order to satisfy their customers’ global communication needs. Whether or not Japan can play a leading role in the international standardisation activities will be a decisive factor for Japan’s international competitiveness in information technology, together with the trend towards globalisation. An important issue to note is that although the industry is becoming more and more global, the information contents will be more local and nationally adapted, due to country specific differences, such as languages, etc.

5.3.2.3 Collaboration and Consolidation
In response to the globalisation and increased competition, there is a growing trend for telecom companies in Japan to seek mergers and tie-ups in order to survive. The growth of cross-border mergers and collaboration between domestic and foreign companies have accelerated since the removal, in January 1998, of restrictions on foreign ownership of new common carriers (NCCs). Almost all major foreign carriers in the telecom industry are today present in Japan in order to take a piece of this profitable market. Foreign companies move into Japan by buying stocks in Japanese companies, forming strategic alliances, or starting their own business as

\(^{132}\) MPT, 1999.
niche operators. Examples of foreign-based operators that have entered Japan are British Telecom and Deutsche Telekom.

Hence, due to increased competition, the industry is presently in a process of consolidation. Many small private companies have not been able to be profitable in the stiff competition and have instead merged or been bought by other carriers. The trend is going from small regional operators to large national operators.

5.3.3 Driving Forces
As outlined above, the telecom industry is very dynamic and in a state of change. The major driving forces for these changes will be outlined below.

5.3.3.1 The Internet Development
The development of Internet has obviously driven the telecom industry towards providing better transferring solutions for datacommuncation. 17 million people in Japan were Internet users in 1998. The pace of the Internet development has been very fast in Japan in recent years. Five years after the launch of Internet services in 1992-1993, the Internet household penetration rate in Japan surpassed 10%. This growth in usage can be compared to the penetration rate of PCs, cellular phones and facsimile machines, where it took 13, 15 and 19 years respectively to reach a 10% penetration. A prediction is that within a two to three year perspective 50-60% of the Japanese people will have access to Internet. A newly launched possibility to use Internet over mobile phones is accelerating the growth of Internet in Japan.

There are many small actors providing Internet services in Japan, and in total there are around 3000 Internet providers in Japan. 11% of the households had access to the Internet in fiscal 1998. 30 to 40% of the Japanese people have PCs in their homes and the number of PCs in Japan is

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133 MPT, 1999.
134 Ibid.
growing fast by around 20-25% per year. More and more people are also buying laptops.

5.3.3.2 Deregulation
Today, there is a global movement toward deregulation and a major driving force of the telecom industry’s development in Japan is the Japanese deregulation process (described in section 5.2.1). Without deregulation, the telecom industry in Japan would not have developed towards increased competition, resulting in new services and higher value for consumers. WTO’s liberalisation commitments, technological advances, and the current Japanese recession in turn drive the deregulation and liberalisation in Japan.

5.3.3.3 The Government’s Priorities
The government is also an important driving force in the telecom industry in Japan. As this industry is seen to be able to contribute to growth for the country as a whole, the government has supported various activities. The government’s policy and investments in different techniques very much determine which techniques that will be prioritised and profitable to produce solutions for.

5.3.3.4 Change in User Needs
The mobile side is a strong coming trend in Japan as well as worldwide and a major change in user needs has been the shift from fixed lines to mobile telephones. This is symbolised by the shrinkage in the NTT fixed-line subscriber base for the first time in the history of NTT. Many of our respondents thought that in a long time perspective the mobile side will take over completely in Japan. Factors that indicate this are mainly that the Japanese people seldom are in their homes and prefer smallness and high technological solutions. Another factor that supports this trend is the world standard for cellular phones that “The International Telecommunications Union” is developing, called IMT-2000. This is the third generation mobile system, which can be used almost all over the world and that will have a
high transfer capacity. These kinds of changes in user needs can be seen as major driving forces in the development of Japanese telecom industry.

5.3.3.5 Increased Demand for Datacommunication

The development of computer technology has grown rapidly and created a new demand for connecting computers. This in turn has increased the demand for datacommunication. The development of Internet has encouraged this trend. Also, the traffic costs for telecom are becoming lower, and when the price for telecom goes down the demand for datacommunication increases on the market. With the growth in datacommunication a need for transferring large amounts of data at high speed has appeared, and for both domestic and international telecom services the demand shifts to higher-speed lines. The number of normal telephone subscriptions is falling in Japan, but this development is compensated almost completely by a growth in the number of ISDN and cellular telephone subscriptions. Technologies for digitalising, e.g. ISDN, have emerged from a demand to transfer high volume at fast speed. Networks in Japan have been digitalised over the last ten years. The development of datacommunication and the technology for digitalising have been two strong forces for encouraging the development of the telecom industry.

5.3.4 Analysis of the Development of the Telecom Industry in Japan

In order to better understand the dynamic forces in the industry, we have drawn a strategic map with arrows indicating in what direction the various actors are moving.

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NTT has traditionally been a national company but is today moving towards offering international telephone services. At the same time, foreign carriers as well as the previous Japanese international carrier KDD are moving into the Japanese domestic market. KDD has traditionally controlled the Japanese international calls and is today trying to strengthen its domestic position while they are moving towards offering competitive international services.

Today, it is mainly national companies that dominate the Japanese telecom industry, but foreign actors have started to establish a presence mainly through mergers and tie-ups. The foreign actors that have managed to enter Japan are mostly very large multinational companies. Hence, there is a trend in the industry towards globalisation and the Japanese telecom industry is moving towards a global industry. However, the Japanese deregulation process in the telecom sector has been relatively slow and therefore Japan can be seen as being slightly behind the rest of the world regarding of globalisation. On the other hand, the movement towards a
global industry is speeded up by WTO & GATT agreements and the economic recession that forces the Japanese government to open up the country. This in turn has increased competition and forced many Japanese telecom operators to cooperate or merge with foreign companies. As a result of this fast development, as well as the increased demand for data communication, the telecom industry’s boundaries are being wiped out; i.e. telecom is merging with data and media. Today, the big companies like NTT, KDD and DDI are leading the way, while other NCCs can be seen as following the trend. At the same time, some NCCs have identified opportunities and developed niche strategies; for example they compete solely in the regional field. Other smaller companies have merged in order to be able to compete against the large actors.

The interrelationships between the discussed phenomena above are illustrated in the following model.

Figure 5.3 Interrelationships in the Industry Development

- Recession & WTO, GATT
- Deregulation
- New actors
- Increased Competition & Falling Prices
- Globalisation
- Telecom, data & media are merging
- M&A, Consolidation

Source: Own

5.4 The ISDN Market
ISDN services have achieved rapid expansion in Japan since 1995 and there has been a significant penetration of ISDN networks. Internet, which is described in section 5.3.3.1, is to a large extent responsible for the
growth of ISDN. The market for ISDN services is now estimated to be worth 570 billion yen.137

5.4.1 History and ISDN’s Development in Japan
In 1988, NTT began offering ISDN services in Japan. Initially, the demand was low and NTT signed up fewer than 80,000 new subscribers annually until 1993.138 This can be explained by the fact that NTT did not market the service enthusiastically at first. The reason for this was that in those early days, terminal equipment and applications were hard to find and the equipment that was available was expensive. The other major factor inhibiting growth was the limited service area.139

ISDN have achieved rapid expansion in Japan since 1995 and there are several reasons for this. The Internet boom in 1992-1993 was one of the reasons why ISDN demand spurred.140 The reason for the sudden jump for ISDN demand was also partly due to the declining equipment prices and growth in applications, but the key factor was NTT’s decision to go nationwide. As service areas grew, many companies began to see the potential of an economic base for their networks.141 Another explanation for the ISDN growth in Japan has been the close cooperation between NTT and MPT.142 In April 1990, NTT decided together with Japan’s regulatory entity, the Ministry of Post and Telecommunications (MPT), to make a vital commitment and offer nationwide ISDN service on demand.143

In Japan, ISDN have been evolving quite differently from other countries, since the Japanese approach to ISDN is part of a wide, government-sponsored national technology project. This project is called the Information Network System (INS), and it encompasses a wide range of

137 NTT’s Annual Report 1999 (NTT’s operating incomes for ISDN/NTT’s market share for ISDN).
138 Lieu, October 1997.
140 Lieu, October 1997.
technologies and applications. INS forms a major part of the government’s initiative to take Japan into the “Information Age” as quickly and as coherently as possible. The results of this policy framework can be seen in a variety of marketed products, and major infrastructure projects. NTT’s plan to optically cable the country by 2005-2010 is another example of this.

5.4.2 ISDN Providers in Japan
There are ten providers of ISDN services in Japan today. As a result of NTT’s former monopoly on domestic calls in Japan, they own the telephone networks and therefore NTT is today the largest ISDN provider and hold 97-98% of the local ISDN lines. Except for NTT, KDD and DDI are the major suppliers of ISDN. In addition, there are several small actors, such as TTNet that offers ISDN only on a regional level. NTT has expanded the ISDN network all over Japan and therefore also has the control over it. Competition exists in the local networks, where competitors provide local lines of ISDN and lease the long distance parts from long distance carriers in order to get a complete connection. Consumers can buy their ISDN subscriptions from other ISDN providers than NTT, but NTT needs to do the installation of ISDN in the consumers’ homes.

KDD is offering ISDN services primarily for corporate customers, services that can be used both for domestic and international transmissions. Customers are linked to KDD via private leased circuits. Switched access contracts allow NTT’s INS-Net subscribers to use KDD’s ISDN services. In addition, KDD is selling their ISDN subscriptions under the name Kcom and they are at present marketing their services on a large scale.

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144 Martin, April 10, 1989.
145 McClelland, March 1997.
147 Lieu, October 1997.
DDI has since July 1997 been offering ISDN through their Internet Access service “DDI Integrated Open Network” (DION). In the end of March 1999, they had 147,200 subscribers for this service.\(^{148}\)

### 5.4.3 Market Size - ISDN Today in Japan

Today, Japan is one of the world’s leading countries in the development of ISDN. Japan has around 126 million inhabitants and out of these everyone can get access to ISDN on demand. ISDN is one of NTT’s strategically most important services and the company has in many public statements emphasised its devotion to support ISDN and sees it as an important future source of earnings. NTT heavily markets the ISDN network in Japan. A projection is that in the future more than 50% of the total communication network will be built on ISDN, in particular for household usage of ISDN. NTT wants all household usage of telephone lines to be through ISDN.

### 5.4.4 ISDN Services in Japan Today

Currently, there are two ISDN services available in Japan. One allows 64kbps (INS-Net 64) and the other allows 1.5Mbps (INS-Net 1500).\(^{149}\) In early July 1997, NTT launched an ISDN service that should be attractive to short-term residents of Japan (INS-Net 64 Lite), where no telephone line deposit is needed. The actual speed and service of INS-Net 64 Lite is the same as INS-Net 64.\(^{150}\)

Small companies and consumers use narrow ISDN (INS-64), while INS-1500 is limited to the medium-sized and large enterprises, which have several facilities, where they can establish internal communication network.

### 5.4.5 Japan’s Current Growth of ISDN

While the number of analogue subscriber lines is falling, ISDN is growing enormously. Since 1995, ISDN subscriptions in Japan have been increasing

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\(^{148}\) DDI Annual Report.  
\(^{149}\) MPT, 1999.  
\(^{150}\) Lieu, October 1997.
by an average percentage of 88%. This is illustrated in the following figure.

Figure 5.4 The Growth of ISDN Subscriptions in Japan

![Growth of ISDN Subscriptions in Japan](image)


In March 1999, around four million households and small companies were ISDN subscribers. During the fiscal year 1999, NTT’s number of INS-Net 64 and INS-Net 1500 subscribers increased by 77% to 3.96 million and 41% to 47.7 thousand respectively. As can be seen from the table above, NTT accounts for around 97-98% of the total ISDN market, which illustrates their dominant position in this field.

The total traffic through ISDN lines when it comes to the number of calls as well as call duration has been increasing steadily in Japan in recent years. There has been a significant rise in using ISDN for data

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151 NTT Annual Report 1999/CIAJ.
transmissions (the other communication mode through ISDN is conversation).\textsuperscript{154}

\subsection*{5.4.6 Costs of ISDN}

The costs for ISDN subscriptions can be classified into three types of costs: one-time fees, installation fees, and monthly charges. There are only small price differences between NTT and other ISDN suppliers. Furthermore, there are only marginal differences in the cost of ISDN in various places of the country see Appendix 5 for more detailed costs.

Some of our respondents said that the price of ISDN will probably fall and follow the same development as that of traditional telephone call charges. The reason is not only price competition but also a deliberate action in order to increase the ISDN usage in Japan. The result is that prices for ISDN are changing fast.

\subsection*{5.4.7 ISDN Standardisation}

Before 1993, different countries had different standards for ISDN and communication between the countries was impossible. Today, EURO-ISDN is the common standard in Europe. The ISDN standard in Japan differs from the European one.\textsuperscript{155} NTT’s ISDN proposal, INS-Net, has through NTT’s monopoly become Japan’s ISDN standard. Even though Japan is not following the EURO-ISDN standard, coordinated traffic between different countries is possible.\textsuperscript{156}

While there is a single standard for ISDN in Japan, there are several data communications standards, and variations within each. Hence, Japan’s INS-Net system lacks standardisation among equipment providers. Just because there is a standard there is no guarantee that the interfaces between hardware components are compatible.\textsuperscript{157} One important point is that ISDN

\begin{flushleft}
\textsuperscript{154} MPT, 1999, p. 146.
\textsuperscript{155} Lieu, October 1997.
\textsuperscript{156} Telia’s Homepage (http://www.telia.se/ews/item/602988.html), August 15, 1999.
\textsuperscript{157} Lemos, September/October 1995.
\end{flushleft}
products from overseas will not work in Japan if adaptations are not made for the Japanese market. A general opinion is that there are no particular laws and regulations that apply for telecommunication equipment today. As long as ISDN products are adapted to the Japanese standard, it is possible to sell them in Japan.

5.4.8 Analysis of the Present Stage of ISDN in Japan
As a result of the discussion of the ISDN growth in Japan, we have illustrated ISDN’s stage in its life cycle in Japan in the following model. We argue that ISDN definitely is in its growth stage in Japan. Since the Internet is a major driving force for ISDN and the demand for Internet is projected to increase rapidly in the future, we believe that ISDN will continue to grow as well.

Figure 5.5 ISDN’s Stage in Its Life Cycle

Source: Own

ISDN was introduced in Japan in 1988 and at first the growth was slow, but since 1995 the development has been very rapid. This is illustrated in the figure above where ISDN entered its growth stage in 1995. We assume that

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158 Lieu, October 1997.
the current stage of ISDN is in the growth stage but has passed its most rapid expansion. How fast and for how long this development will continue before the ISDN market matures in Japan will depend on a number of unsure factors. (That is the reason why the rest of the curve is outlined in various ways.)

One factor supporting a longer existence of ISDN is the Japanese government’s and the dominant actor NTT’s large investments in the ISDN technique and the latter’s current dominating position as well as its commitment to continue to support ISDN in Japan. Another factor that could make the lifetime of ISDN longer is if the government continues the deregulation process of the telecom industry and forces NTT to let their ISDN networks to other carriers at a low cost. This would increase the competition among ISDN providers and thereby force them to offer value-added services at a lower cost. This in turn would increase the demand for ISDN among customers. A low price of ISDN could make consumers choose ISDN over substitute techniques.

One factor supporting a shorter existence of ISDN can be the very fast pace of technological development in Japan, which has the result that a transfer capacity of 64 kbps can soon be insufficient and consumers will demand other services that can offer higher capacity. In response to customer’s demands and due to the dominance of NTT in the fixed networks, carriers that want to compete with NTT will most probably compete in substitute technologies to ISDN. A probable scenario, if the government does not force NTT to lower its access charges, is that other carriers will develop the mobile infrastructure for telecom in order to get around the charges that they have to pay for using NTT’s networks. Another reason for shorter existence of ISDN is that there are relatively few users of ISDN services in Japan today, compared to the marketing efforts made. This lead to a situation where new customers today choose other techniques than ISDN, with faster transferring capacities, even though they are more expensive.
The mature stage will come when substitute techniques emerge on the market. When the industry is challenged by superior substitute technologies, which replace the old ones, the industry enters the decline stage. It is certain that the development for ISDN will go fast compared to ordinary product life cycles since the telecom industry in Japan is very dynamic. The question is how fast this development will be. Our prediction is that the ISDN technique will enter its maturity stage rather soon, and then the curve will start to slope downwards. However, we believe that ISDN will stay in the maturity stage for a while before it vanishes from the market, since ISDN is fairly widespread in Japan. We argue that the ISDN technique will certainly have been replaced by other techniques in five to ten years.

5.5 Structure of the ISDN Actors

5.5.1 Competitors
The competitors described in this section are those actors that produce telecom equipment and that are potential producers of ISDN products. These are telecommunication equipment manufacturers in Japan. Japan is the home country of many gigantic telecom equipment companies, such as NEC, Matsushita, Hitachi, and Toshiba that produce hardware applications for ISDN. See Appendix 6 for a further outline of telecom equipment companies. The telecom equipment industry has many similarities with the overall telecom industry in Japan; it has recently become very competitive, price is important and profits have been squeezed. Some companies have merged, others have outsourced non-profitable divisions. Furthermore, some telecom equipment manufacturers are part owners in the New Common Carriers.\footnote{Scott-Joyn, March 1999.}
5.5.1.1 ISDN Products in Japan
To have integrated services in telephones is becoming very popular in Japan. The producers at the forefront of making integrated equipment are NEC, Fujitsu, Yamaha and Suntac. From a minor survey conducted at a telecom exhibition in Tokyo (JAPAN COM 1999), we found out that there are several companies producing ISDN products, but at present NTT is the only company that provides an integrated ISDN telephone. This telephone was launched in October 1999. The product has a wireless function (the consumers can communicate wireless with the phone), but it lacks other functions such as a smart card reader. There are also other companies (Sharp and TDK) that will soon have these kinds of products.

5.5.2 Intermediaries
When installing ISDN in Japan, people must have the ISDN hardware ready. Those products can be bought independently from ISDN subscriptions, and are sold in telecom carriers’ own stores or stores selling electronics. Different ISDN equipment in Japan and their prices are shown in Appendix 7. In the following figure we have illustrated how ISDN products can be distributed in Japan.

Figure 5.6 ISDN Telephones Distribution Channel

Source: Own

Telecom carriers supplying ISDN subscriptions (NTT, KDD and DDI) have their own organised trading companies. These trading companies
either sell the products through the carriers’ own retail shops (flow number 3) or through independent retailers (flow number 1). Sometimes the carriers also sell their products directly to retailers, thus bypassing the trading companies (flow number 2). Japanese telecommunication equipment manufacturers sell their products either to telecom carriers, or through own shops to retail shops (flow number 4). Generally, retailers have good margins, especially if they control the wholesale function themselves and therefore they have a strong position in the distribution line.

5.5.3 Customers
In Japan there are no restrictions on the sale of telecom terminals, e.g. ISDN telephones. There are mainly three potential types of resellers (customers) to target (highlighted in figure 5.6) and these are telecom carriers offering ISDN services, retailers (electronic stores) or telecommunication equipment manufacturers. The potential end-consumers for ISDN product are households and small offices and home offices (SOHO’s). The marketing policy of the retailer will determine what kind of end-consumers will be targeted. In the following section these different customers will be discussed.

5.5.3.1 Telecom Carriers
Japanese telecom carriers are not directly engaged in the manufacturing of telecom equipment but they are sometimes cooperating with their suppliers for research and development of new products. They often also procure products developed by telecom equipment manufacturers and sell them under their own brand names. ISDN services in Japan are overwhelmingly supplied by NTT, and they are therefore the main buyer of ISDN products.

Until recently, traditional relationships forced telecom carriers to purchase expensive equipment from a limited number of Japanese suppliers. However, as a result of the Japanese recession and the cost consciousness, many of these companies are changing their procurement policies today and are becoming more open towards new domestic as well as foreign
suppliers. Carriers publicise the specifications of the equipment they procure to help all telecommunications manufacturers get access to their market regardless of nationality. Presently the import ratio of foreign equipment for telecom is 40%.\(^\text{160}\).

### 5.5.3.2 Retailers

Telecom equipment can be sold to retail chains, but since these chains often have established relationships with distributors in Japan, it is necessary to target the distributors in order to reach the retailers. In Japan the main retailers of telecom equipment can be divided into Consumer Electronic Stores and Camera Shops. There are several Consumer Electronic Stores chains in Japan, which usually provide a great variety of electronic equipment. From the beginning Camera Shops sold cheap cameras, but today they sell watches, telephones and all types of electronic equipment. These chains have several branches and are often located near the subway stations. They are aggressive and have prominent advertising campaigns. The biggest “Camera chains” are “Yodobashi Camera shops” and “Bic Camera”, see Appendix 8 for a further description of different Consumer Electronic Stores and Camera Shops in Japan.

### 5.5.3.3 Japanese Telecom Equipment Manufacturers

The Japanese telecom equipment manufacturers possess sales networks catering to all sales territories throughout Japan, and offer highly satisfactory technical support services and client services through these networks. Even though these actors can be competitors to companies producing telecom equipment, benefiting from this support can be highly advantageous.\(^\text{161}\) The products that these types of companies buy are promising products that are technically advanced and introduced into the Japanese market for the first time.

\(^{160}\) JETRO, December 1998.
\(^{161}\) JETRO, March 1996.
5.6 Substitute Technologies

As mentioned, Japan’s telecom sector is experiencing a period of great activity and fast change. This is also true for the development of different techniques that are suitable to meet the needs and demands that correspond to the development of the industry. There is a common opinion among our respondents that the development of the industry will be very rapid in the coming years and especially between 2000 and 2005. The fast development in the industry implies that techniques and products have a short life cycle. In the next section we will describe the trend for a couple of identified substitute technologies for ISDN.

ISDN is growing very quickly in Japan but there are other techniques that compete in the arena of future transfer methods. We are focusing on techniques that can be used as a way of connecting to Internet, thus transferring data. Below we have identified a couple of the main substituting technologies to ISDN in Japan and these are DSL, cable, satellite and mobile systems. These technologies have reached different stages of development and we will describe their current state in Japan today. We will also discuss which actors that specialise in the various techniques.

5.6.1 Digital Subscriber Line (DSL)

DSL comprises two various techniques, ADSL and SDSL, which can send high-speed data through existing copper lines. ADSL lets users download quickly, but uploading is slower. This makes it good for surfing on the Internet, video/audio and downloading from corporate LANs (Local Area Networks). SDSL offers the same high speed whether uploading or downloading, making it suitable for applications such as video conferences. SDSL is usually marketed to businesses while ADSL is usually marketed to consumers as it offers high-speed data transfer at a fairly low price. This makes ADSL a direct substitute to ISDN.\(^\text{162}\) A problem so far with DSL is

\(^{162}\) Rice, March 29, 1999.
that the life span for the signal is not very long. DSL includes no services (which is one of the main advantages of ISDN); it is only a “highway” for transferring information.

NTT dominates the access network also for DSL. Since only a few companies gain access to NTT’s copper network, NTT is the main driving actor for this technique. NTT’s priorities lie in the FTTH project and their ISDN services, although they are at present studying the DSL technique. The fact that NTT does not prioritise DSL means that this technique is not very recognised in Japan today.

5.6.2 Cable
At present the cable TV market is undergoing a rapid change. High-speed Internet access through cable TV networks is increasingly being used as a substitute for Internet via telephone lines. The Japanese authorities support an opening up of the market and foreign actors see this as an opportunity. Examples are AT&T and British Telecom that are making buy-ups in the domestic cable TV companies. They offer competitive alternatives to NTT’s ISDN and other services. The combination of foreign actors having the capital and knowledge, and the Japanese cable TV companies having the networks, is a major driving force in this field.

According to MPT’s White Paper 1999, there were 28 cable-broadcasting operators offering Internet connection services in 1998. The number of Internet subscribers via cable was around 21,000, i.e. approximately 2% of the households that had cable television. 20 of the 28 broadcasting operators offer a fixed monthly rate of 5,000 yen, for Internet use over cables regardless of how many hours used.\(^{163}\) This makes it rather expensive with Internet connections over cables for private consumers in Japan today.

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\(^{163}\) MPT, 1999.
5.6.3 Satellite
According to MPT’s White Paper 1999, providing Internet connections via satellites enables wireless transmission of a large amount of data. Satellite-based Internet can transmit several hundred kbps to several Mbps of data. Currently, only a few operators offer Internet services using satellites in Japan and their services are mainly limited to corporate users. However, with the increased efficiency in satellite transponder usage, there have been moves to start up services targeting individuals. Actors supplying Internet via satellite today are Japan Satellite Systems Inc. (JSAT), Space Communications Corp. (SCC) and PanAmSat. These companies offer domestic satellite communications services via their own satellites.164

5.6.4 Mobile Systems
Mobile phones are gaining ground in Japan. It is estimated that in between five to ten years around two thirds of the Japanese population will have mobile phones, i.e. 80 million subscribers.165 The speed will depend on the competition, which has increased since the deregulation started in the beginning of the 1990s. Even today there exist mobile services that allow 64kbps data transmission.166 The third generation mobile systems will be introduced on the Japanese market in 2001. It takes around ten years to develop a new standard, and the fourth generation mobile systems will come into use in 2008-2012. This standard will enable even higher speed of information transfer and make it possible to see moving pictures on cellular phones.

5.6.5 Analysis of ISDN vs. Substitute Technologies
To summarise we can say that there are several substituting techniques to ISDN in Japan, but ISDN is by far the most developed and prioritised technique today. The greatest threat can be seen as coming from wireless solutions, since they are in line with the Japanese lifestyle, the high and

164 MPT, 1999.
166 IDO’s homepage (http://www1.ido.co.jp), September 16, 1999.
rapid penetration of mobiles, as well as coming transfer capacities over mobile telephones. The future of ISDN will also depend on how much the Internet usage will increase, since high frequency use makes for example cables cheaper. Another important factor is how the telecom industry will develop, and what type of actors that will grow large. The reason why this is important is because new actors compete most efficiently by investing in competing techniques to ISDN, due to NTT’s monopolistic position in this field today. NTT’s future actions will have a direct influence on the ISDN development, as it is the dominant actor within this market. The price setting that NTT will pursue, will have a large influence on the demand for ISDN services and thereby in turn the size and growth of the ISDN market.

5.7 Analysis of the Industry Logic

The parts described above are logically tied together and structured after the industry analysis model in Chapter 2. We think that the information provided in this chapter creates the necessary base for understanding the industry. If a company has knowledge of the various factors described and analysed in this chapter, they have enough information to be able to navigate on the Japanese ISDN market.

The telecom sector in Japan has traditionally been very regulated, but is today opening up which means that new conditions for competition in the industry emerge. This fact together with Japan’s leading role in electronics clearly illustrate that the market for ISDN products in Japan is very competitive. At the same time, it is very important to be aware of the fact that NTT still exercises a huge influence on the industry. This chapter has clearly stated that there are a market and a demand for ISDN services and ISDN products in Japan. However, in a longer perspective the ISDN technique will probably have been replaced by other technologies with a higher capacity of transferring information. A foreign company that wants to establish a presence in this industry has to be well prepared and have an establishment strategy for how to penetrate the market. This will be discussed in the next chapter from the perspective of our case company.
HOW TODOS CAN ENTER JAPAN
6 HOW TODOS CAN ENTER JAPAN

In this chapter the findings in the previous two chapters are discussed and analysed from the perspective of our case company Todos. We aim to end up with recommendations regarding how Todos can enter the Japanese telecom industry by taking into consideration different entry modes. Since the two previous chapters are aimed to constitute a base for the discussion in this chapter, we start by giving a short summary of the main findings so far.

6.1 Summary of the Previous Two Chapters

In the beginning of the 1990s, Japan entered a financial crisis, which has caused several changes in the country. The Japanese government has started a deregulation process in several sectors and been forced to open up its trade with the rest of the world. The Japanese consumers can be perceived as difficult to satisfy. It is critical to be aware of a general demand for maintenance and after-sales services, high quality, as well as the importance of having a recognised brand name or uniqueness. When it comes to ISDN, there definitively exists a growing market for ISDN services and ISDN telephones, and in Japan the ISDN network is very well developed. However, in a five- to ten-year perspective the ISDN technique will most probably have been replaced by other techniques, which means that actors that want to supply products to this market must move fast.

6.1.1 Does a Fast Moving Industry Call for an Unusual Entry Mode?

The telecom industry is in many respects very different from traditional manufacturing industries. An assumption could be that the key to success in this industry is to pursue a totally untraditional establishment strategy. However, when it comes to Japan, strong ties in relationships still prevail and building long-term mutual understanding is very important. Even though the financial crisis and the deregulation process have triggered many changes in the telecom industry in Japan, NTT still holds a next to
monopolistic position. This is particularly relevant when considering products that are used with ISDN subscriptions, since NTT controls 97-98% of the ISDN networks in Japan. In addition to sales through NTT’s own stores, products are sold through electronic stores and even though there are trends that indicate that the Japanese distribution system is changing, these stores’ procurements are mainly done through established distribution networks.

The conclusion of this discussion is that a company that wants to sell a consumer product in the telecom industry in Japan has to take into consideration the importance of NTT, and having the right contacts to be able to distribute the products. The outcome of our research has resulted in the conclusion that it is extremely difficult to get around the strategic impediments that exist in the Japanese market unless a company is goal oriented and committed to investing time and money in targeting the market.

6.2 Exposure to the Japanese Competition

Before entering Japan, Todos needs to consider whether they are prepared to meet the stiff Japanese competition. This can either be seen as a threat, or as a challenge to perform better. In the latter cases Todos could use its experiences from Japan in order to become more competitive on other markets. If Todos chooses not to enter Japan, it faces the risk of sooner or later being beaten, when they face competition from Japanese companies on international markets. In fact, it is a big decision if Todos does not enter the Japanese market, since Japan accounts for 20% of the total world market and 25% of the world market for IT and telecom. The fact that the Japanese IT and telecom industry are growing rapidly, and might become world leading in the future, makes Japan an even more interesting country.

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167 Swedish Trade’s Homepage (www.swedishtrade.se), September 15, 1999.
6.3 Commitment

Due to the Japanese external environment, which in many aspects is complex, an important characteristic is to be committed in order to be able to act goal oriented when entering the fast-changing telecom industry. A clearly demonstrated commitment to develop long-term relationships is crucial to overcome the Japanese people’s suspicion to do business with foreigners. After-sales services in Japan are as important as the product, and therefore Todos has to emphasise its commitment and long-term perspective to potential customers in order to achieve contracts. Otherwise a lack of reliability can be signalled that can make customers doubt whether Todos will stay on the market and offer after-sales services and upgraded versions of their products.

6.4 Entry Challenges

The following section aims at discussing structural impediments for market entry in Japan. Overall, barriers for entering the Japanese telecom market are decreasing. As discussed in Chapter 4 the economic recession has brought a need for deregulation and opening up of various sectors of the industry. The recession has also created an increased cost awareness for procurement among Japanese companies, thereby making it easier for foreign suppliers to break into the market. A rising yen, the government’s withdrawal of import duties, and globalisation trends indicate that imports into the Japanese telecom sector will be easier in the future.

6.4.1 No Formal Barriers

There are no formal laws against entering the particular market segment within the telecom industry where Todos is active. However, there are other non-formal challenges that could hamper a market entry for a foreign company just as effectively, and these will be discussed below.

6.4.2 Challenges for Establishment in the Telecom Industry

An effect of the fast-changing telecom industry is that products normally have short life cycles, which implies that Todos has to be prepared to take a
relatively large initial financial risk to create a fast market penetration. It is very difficult to estimate exactly how much an establishment will cost, since it depends on several undetermined factors, such as the type of entry mode. Swedish Trade estimates that going into Japan requires at least an investment of around SEK 4 million.\textsuperscript{168} However this cost involves consultancy services from Swedish Trade and therefore the cost for Todos might be lower. Anyhow, it is important to emphasise that to enter the Japanese market involves large \textit{capital requirements}, especially if Todos wants to make a fast market penetration, and there is usually a relatively long payback time when setting up operations in Japan. Furthermore, a company that wants to build brand recognition in Japan usually needs to be present in the country, and this brings extra costs.

A general opinion is that it is very unusual to make a profit during the first year of operations in Japan, due to the complex Japanese environment and the emphasis on building long-term relationships. The normal payback time for an investment in Japan is three to five years.\textsuperscript{169} On the other hand, the telecom industry can be seen as different from traditional industries, since it grows and changes rapidly. Hence, a reasonable estimation for the telecom industry is a payback time of around two years. The payback time will vary according to how successful the establishment is and how the company chooses to enter the market. However, once a foreign company makes a profit it is normally high, due to good margins and a high Japanese price level.

The huge Japanese telecom companies have achieved \textit{product differentiation} as they have well-known brand names and good reputation on the Japanese market. Hence, entering Japan with the brand name “Todos” can be difficult, as the Todos brand is unknown in Japan. In this sense it can be difficult to compete against these Japanese giants.

\textsuperscript{168} Interview, Japan.
\textsuperscript{169} ibid.
Todos’s Japanese competitors, i.e. the huge Japanese electronic companies like NEC, Fujitsu and Hitachi, manufacture products on a very large scale and thereby achieve economies of scale. Due to the size of these companies, they can buy components in very large quantities and thereby press prices. Furthermore, these companies often have production in low wage countries where they can take advantage of mass production. These factors might mean that Japanese manufacturers can achieve cost advantages compared to Todos’s production costs.

Japanese companies have cost advantages of existing products, independent of economies of scale. Compared to Japanese companies, foreign companies are generally forced to charge a higher price for their products in Japan mainly due to adaptation costs, for special packaging and handling, translation and transportation. This is a disadvantage for Todos since these extra costs will lower their margins. Todos has one advantage in this respect. Even though they have to adapt to the Japanese requirements, they have their production base in Taiwan and China, which is very close to Japan, and therefore the transportation costs will not be higher than those of most Japanese competitors since the competitors often have production outside Japan.

The potential industrial customers of Todos will inevitable have some switching costs if they switch to Todos as a supplier. The importance that companies attach to long-term relationships makes Japanese companies reluctant to change supply basis, and therefore if a Japanese company has a well-established relationship with a Japanese supplier for procurement, changing supplier will involve inconvenience costs from breaking up a relationship. However, there might of course be a possibility for Todos to find a customer that lacks Todos’s type of product and instead sees Todos as a complementary supplier. Long-term relationships also sometimes

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make it difficult for a foreign company to get access to distribution channels in Japan.

To find and train a new supplier involve costs in the form of lost time. Companies fear retaliation from existing Japanese suppliers if they switch to foreign suppliers, and they are also afraid that a foreign supplier will not make shipments on time or may lack after-sales service ability. These factors contribute to a reluctance among Japanese industrial customers to switch to foreign suppliers, even if they are offered a lower price. An opinion is that the price offered by a foreign supplier should be around half or two thirds of the Japanese competitors’, in order to make NTT or KDD interested in changing supply base. Therefore, it is vital that Todos is able to supply products at competitive prices.

6.4.3 Non-formal Entry Challenges

The preferences of the Japanese customers can be seen as one of the largest challenges for many companies, since Japanese consumers are often perceived as very demanding. They tend to prefer Japanese products, particularly in electronics. Japanese people are suspicious towards foreign companies, as they doubt that they will offer the same high level of quality and service as Japanese companies do.

In addition, Japanese industrial customers are more ready to deal with other Japanese than with foreigners. This has much to do with tradition and cultural and language differences as well as the fact that many foreign companies are not concerned with building the long-term relationships that are so vital in Japanese business practice. Japanese culture is group-oriented and therefore Japanese people tend to help each other when threatened from outside. Competition between Japanese companies exists, but when faced with competition from outside, old internal rivalries tend to be forgotten. A clearly demonstrated commitment to develop long-term relationships is necessary.

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171 Interview, Japan.
172 ibid.
relationships with Japanese business people is crucial to overcome their reluctance to do business with strangers.

6.5 Customers to Target
In Chapter 5 we identified three channels of distribution for ISDN products in Japan: telecom carriers, retailers and telecom equipment manufacturers. All of these are potential customers for Todos, which has its own distribution channels, through which Todos’s products could reach the Japanese end-consumers. Todos has to make an evaluation of what kind of customer to target, since each type of customer has its own advantages and disadvantages. The following table gives a short overview of the customers’ various pros and cons and is aimed to be a base for the subsequent discussion of how to enter Japan. A further discussion of these different customers will be given in section 6.7.
Table 6.1 The Customers’ Pros and Cons

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<thead>
<tr>
<th>Pros</th>
<th>Retailers</th>
<th>Telecom Manuf.</th>
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<tbody>
<tr>
<td>ISDN providers = large volumes</td>
<td>Several actors</td>
<td>Several actors</td>
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<tr>
<td>Service capabilities</td>
<td>Relatively much control</td>
<td>Knowledge exchange</td>
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<tr>
<td>Possible to sell on OEM</td>
<td>Fewer intermediaries</td>
<td>Service capabilities</td>
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<td>= lower investments</td>
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<td>Possible to sell on OEM = lower investments</td>
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<tr>
<td></td>
<td></td>
<td>In an alliance = possibility to get a competitive advantage in world markets</td>
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<tr>
<td>Large actors = difficult to get attention,</td>
<td>Investments in building brand name and reputation</td>
<td>Risk of losing know-how</td>
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<tr>
<td>power to press prices</td>
<td>Often no after-sales and maintenance</td>
<td></td>
</tr>
<tr>
<td>Existing cooperation with suppliers</td>
<td>Powerful actors = lower margins</td>
<td>Large actors = difficult to get attention</td>
</tr>
<tr>
<td>NTT has a competing product (ISDN telephone)</td>
<td></td>
<td>Have own production</td>
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<tr>
<td>OEM = lower margins</td>
<td></td>
<td>TDK and Sharp have competing products in the near future</td>
</tr>
<tr>
<td>Few relevant carriers to target: NTT (largest), KDD, &amp; DDI (controlled by tel. man. Kyocera)</td>
<td></td>
<td>OEM = lower margins</td>
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Source: Own

We think that one complementing distribution and marketing channel would be to offer sales over the Internet. A service-friendly Internet homepage, preferably also in a Japanese version, can also act as a complement to the after-sales service and maintenance that is important to offer in Japan.
The following model sums up how the end-consumers can be reached by targeting the different kinds of customers. For a further discussion, see section 5.5.3.

Figure 6.1 Todos’s Possible Ways of Distribution in Japan

![Diagram of Todos's Possible Ways of Distribution in Japan]

*Source: Own*

A general aspect is that it takes a long time to establish relationships with any of these customers in Japan, due to factors such as long-term relationships, Todos’s lack of reputation in the Japanese telecom equipment industry as well as the sizes and already established relationships at the customer side. Furthermore, all these actors are rather powerful in Japan, which make them able to press prices. Todos has no patents and this is a conscious strategy due to the industry’s fast technological development pace. When entering the Japanese technologically advanced market the risk of losing the know-how cannot be neglected. This risk varies depending on what type of customer to target.
6.6 Entry Modes
After having identified the customers it is important to see how Todos could target them. The first step is to choose how to enter Japan and this section evaluates different entry modes and their implications for Todos.

6.6.1 A Domestic Export Department
A domestic export department is used by companies that manage their exports and contacts with customers on foreign markets from the home country instead of establishing contacts or a presence on overseas markets. Today, Todos handles its exports from its office in Sweden, but always with the help of some representative on the foreign market. Due to Japan’s competitive and fast-changing telecom industry, it can be extremely difficult to manage sales solely from an export department in the home country. This can instead act as a complement to some kind of presence in Japan.

6.6.2 Sending Home-Based Sales People Abroad
A company can send home-based people to Japan, either in order to start up the business or to establish a permanent presence. By being present in Japan a company can create personal relationships with customers and gain a good knowledge of the market. This can be a way to increase Japanese customers’ perception of a foreign company’s commitment to the Japanese market. Local presence of a key person, who can represent the company and take important decisions, is therefore important. A permanent presence will make it easier (and sometimes it is even a prerequisite) for a company to build brand recognition, and sell products under its own brand name.

Allgon is an example of a Swedish company that produces antennas for cellular phones. This company has managed very well to establish sales through sending home-based people abroad. Initially they tried to approach distributors, but when they did not get any positive reactions, they instead sent two Swedish engineers to Japan that managed to contact, and sign contracts with OKI Electric Industry, NEC, Fujitsu and Sony. This
company will now, after their initial success, move over to establish its own overseas branch office in Japan.\textsuperscript{173}

\subsection*{6.6.3 Exporting with Foreign Agent}
By using a foreign agent the risk and initial investment will be lower than opening up an office. This is of particular importance in the Japanese telecom industry, where establishment costs are normally quite high, due to a rapid industry development and stiff competition. Through an agent, Todos can get access to local market knowledge and a potential customer base. It is important that the agent has established marketing channels and contacts in the specific industry. When entering Japan, the agent should preferably be Japanese or at least familiar with the Japanese language and culture since these are among the main obstacles when entering a market. By using a local agent Todos can overcome Japanese challenges more easily than if it enters the market with non-Japanese people. The disadvantages involved in using an agent are that Todos does not build up its own knowledge of the market to the same extent, as they would do if they enter Japan by themselves. Furthermore, the motivation and commitment of an agent may be weaker than that of its own employee from Todos. We will discuss important partner characteristics in section 6.6.6.

\subsection*{6.6.4 Exporting with Foreign Distributor}
The advantages and disadvantages with distributors are very similar to those of using an agent but we will point out some specific features. Distributors in Japan usually have contacts that cover a specific territory or a specific industry. For Todos, which is selling consumer products, a particular kind of distributor is the chains of stores specialised in electronic products.\textsuperscript{174} However, it can be very difficult for Todos to target a \textit{chain store} directly and Todos alternative is to go through some other type of distributor. We have focused on evaluating different types of trading companies.

\begin{flushleft}
\textsuperscript{173} Swedish Trade’s Homepage (www.swedishtrade.se), December 1, 1999.
\textsuperscript{174} Interview, Japan.
\end{flushleft}
A *trading company* is a specific type of distributor and another potential type of partner for Todos. Trading companies have a long tradition in Japan and *large* trading companies (Sōgō Shōsha), e.g. Mitsubishi, Mitsui, Marubeni and Itochu are still influential actors in the Japanese distribution system. One of their characteristics is that they often take small margins but sell very high volumes. The large Japanese trading companies often sell many different products, which means that their involvement in *each* product gets lower.

There are also many *small* trading companies in Japan, operating in specialised areas. Small trading companies are generally the most appropriate ones to use for a small company like Todos, unless the company expects to undertake large-scale transactions. Since large trading companies carry several products which might result in lower involvement for Surf Lite, the best thing for Todos would be to find a *small* trading company that has knowledge in the type of products that Todos is selling, since this might result in a relatively higher involvement. Important characteristics are that a trading company has established distribution channels to the end-consumers of Todos’s products. Furthermore, it is important to check that a trading company does not represent a competing Japanese producer or is related to a larger group, which has competing lines of products, since there is a risk of a lack of commitment for Todos’s products.

Micronics is a Swedish company, which is active within the IT industry and which entered the Japanese market in 1994 with the help of a trading company. At that time, they were about the same size as Todos. Through the trading company, the Swedish company managed to establish a relationship with a large Japanese company that bought its products. The fact that a large Japanese company chose to take on their products gave

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175 Interview, Japan.
176 Interview, Sweden.
177 JETRO, 1998.
Micronic a very good reputation on the Japanese market. Now, Japan is Micronic’s second largest market on a worldwide basis and they have managed to establish a leading position in Japan within their particular market segment.\textsuperscript{178}

\textbf{6.6.5 Alliance}

An alliance with a Japanese company can involve different types of cooperation. This entry mode often requires taking a long-term perspective on market entry, which might not always be possible in fast-changing industries. The main advantage of an alliance is the ability for companies to combine core competencies and have knowledge exchange, which together can contribute to strengths in world markets. By cooperating with a Japanese company, Todos could also take advantage of the partner’s reputation and established position in Japan. The disadvantage with this kind of alliance is the risk of losing know-how. Also, if an alliance involves setting up joint projects, such as R&D, the cost of establishment might be higher than if a company uses an agent or a distributor, but on the other hand, it might be more lucrative in a longer perspective. The question is whether Todos has the resources and time to wait until such a partnership will be profitable.

\textbf{6.7 Important Partner Characteristics}

The most relevant entry modes for Todos seem to be an agent, a distributor/small trading company or an alliance. An agent and a distributor/trading company involve some kind of partner. Hence, in our opinion the right type of partner is the key for Todos to secure adaptability to the unique Japanese environment. The reason for this is Todos’s lack of market experience and its small size, which means limited resources. The factors discussed below are important to consider in order to choose a partner that can help Todos into Japan.

\textsuperscript{178} Interview, Japan.
A very important aspect when choosing a partner is to ensure that the partner has *established contacts* with a potential customer for Todos, preferably at a high hierarchical level in the customer’s organisation. The reason for this is that Japan is a hierarchical society where relationships are fundamental. The partner could, for example, sell products complementary to Todos’s to the same customer base and this will make it easier to get access to an existing distribution network.

The partner’s *commitment* to actively sell Todos’s products is a very important factor for success and is often dependent on if the partner can make money on the products. If the partner does not have the commitment or resources to invest in Todos’s products, limited or no sales will be undertaken.

Another important aspect is that the partner is *trustworthy*, since Todos wants to safeguard its products and technological know-how. This is of particular importance in Japan since the Japanese traditionally are very skilled at copying foreign products. Otherwise the local Japanese partner may become a competitor in world markets through copying Todos’s products or selling it to competitors that can copy the product. Furthermore, the terms of cooperation are normally not clearly stated in Japanese contracts, something that can increase Todos’s insecurity unless they are able to trust their partner.

Another criterion that is important for achieving success in Japan is to be able to offer the customers a high level of *after-sales services and maintenance*. When Todos evaluates a potential partner, it is important to consider if the partner possesses the skills necessary to do this. If the partner does not, it is vital that Todos finds another solution. One possible way is to buy the service for the products from a Japanese technical company that provides this.
6.8 Todos’s Alternatives
In this section we will make an evaluation of Todos’s alternatives for entering Japan, by combining the information given so far.

6.8.1 OEM Basis
The most likely, or maybe even the only way of selling products to telecom carriers and large telecom equipment manufacturers in Japan is to sell on an OEM (Original Equipment Manufacturing) basis. The reason for this is that these companies have such power that they can more or less dictate the terms on which they buy products. OEM is when a so-called “gate-opener” brings in unlabelled goods from a producer in order to sell them under its own brand.179 A company selling through OEM does not have to invest in building brand recognition since the products will then be sold under another company’s brand name, making a fast market penetration possible. Selling on an OEM basis is a rather short-term strategy, as Todos would give up the right of selling Surf Lite by themselves. Furthermore, there is a risk of losing the technique. Selling on an OEM basis usually gives the producer low margins and therefore Todos has to consider its ability to produce at a low cost. Another disadvantage with selling products through OEM is that a company does not control the market introduction or the distribution of its products.

6.8.2 Long-term vs. Short-term Perspective
A critical aspect is whether Todos decides to take a short-term or long-term perspective on entering the Japanese market. By taking a short-term perspective we mean that Todos aims to earn as much money as possible from the product Surf Lite and in an initial stage is not concerned with making investments for an enduring establishment. If Todos wants to have the possibility of introducing several products consequently in Japan, as well as upgraded versions they should have a long-term perspective on the market entry, but this strategy may involve larger investments and longer

payback times. Different customers and different entry modes have different implications for this issue and this will be presented below.

6.8.3 Find a Partner and Target a Telecom Carrier

If Todos has a short-term outlook on the Japanese market and wants to enter as fast as possible, mainly in order to achieve as large sales as possible of their product Surf Lite, we recommend them to find a partner that could target telecom carriers that sell ISDN subscriptions, i.e. NTT, KDD or DDI. Todos’s products could then be sold through the carriers’ established distribution networks, and Todos could also use the carriers’ service and maintenance networks.

Out of the various telecom carriers, NTT would be the best one to come in contact with since they can offer large sales volumes, and thereby Todos could achieve economies of scale in their production. If Todos makes the choice of targeting NTT, the most probable outcome is that they would have to sign a contract of selling on an OEM basis, and thereby give NTT the exclusive control of Surf Lite in Japan. This would give Todos large short-term profits, and they would give up the chance of selling the product themselves in Japan. What is important to consider in connection with this is the life cycle of Surf Lite. We estimate that the ISDN technique will be out of use on the Japanese market in a five to ten year perspective. Within this time frame, Todos might not have the possibility to establish a presence and a brand name and be able to achieve its own sales of Surf Lite, so selling to NTT is fairly reasonable. However, today NTT already carries an integrated ISDN telephone and also has established relationships with Japanese telecom equipment manufacturers. Whether NTT will be interested in Todos’s product or not depends very much on Todos’s relative competitive advantage. The real threat of selling to NTT is that NTT, as a powerful company, can copy Todos’s know-how and thereby become a competitor in the rest of the Asian market. We believe that the risk for this is limited since NTT is very aware of its reputation. The reasons for this are the intense competition and NTT’s large size and long tradition in Japan.
The problem is if NTT does not make any efforts to sell Todos’s product and sign a contract only with the purpose to reduce the competition for its “own” products in Japan.

Selling to KDD involves similar considerations as selling to NTT, although KDD might not be able to offer the same sales volumes as NTT, since they are a smaller ISDN provider and mainly targets corporate customers. On the other hand, KDD might be easier to come in contact with than NTT, since NTT already carries a product similar to Todos’s. DDI is also providing ISDN services, but might be the most difficult carrier to target since the telecom maker Kyocera controls DDI. On the other hand, both DDI and KDD are currently offensive challengers to NTT and they might think that Todos’s product Surf Lite is a perfect product with which to compete against NTT, and thereby gain a stronger position in the domestic market.

If the relationship with a telecom carrier only will be for a short time period, it can still be a way for Todos to achieve recognition in the market. If NTT, KDD or DDI choose Todos’s products it will give Todos a good reputation and a base from which it is easier to target other customers later on.

However, there is of course a possibility that Todos succeeds in building up long-term relationships with any of the above-mentioned carriers, although we think that this opportunity can be limited due to the carriers’ already established long-term relationships with Japanese suppliers.

6.8.4 Find a Partner and Target a Retail Chain
If Todos wants to establish a long-term presence on the Japanese market, the most suitable establishment strategy in our view would be to target retail chains, i.e. electronic stores. This is possible in Japan since ISDN products can be sold independently from ISDN subscriptions. Furthermore, the electronic stores have a very good reputation in Japan. Since electronic
stores in Japan buy products through complicated distribution relationships, it is almost impossible to target these stores directly. Instead, Todos has to find an agent or a distributor/trading company that can handle these relationships and preferably already have previous contacts with them.

If Todos chooses to target retailers, they have to build brand recognition, which is especially important in Japan’s electronic industry. This takes time, especially in the telecom industry, and involves large investments. Investments have to be done in marketing but also preferably in the opening up of a permanent presence in the country, which the Japanese can “relate” to. Since the telecom industry is growing and changing rapidly, the question is whether Todos has enough time to wait until their brand is recognised in Japan. Building brand recognition would probably not result in large sales of Surf Lite, but rather of other products that Todos will produce in the future and therefore a long-term perspective is necessary. To target retailers would limit the risk for Todos of losing their technique to competing telecom companies. A problem with targeting retailers is that these stores usually do not handle after-sales services and maintenance. A possibility to solve this might be to find a partner that can handle the critical service aspect or to buy it from an independent company.

6.8.5 Find a Partner and Target a Telecom Equipment Manufacturer

A third alternative for Todos is to target a telecom equipment manufacturer through a partner. Todos can choose to target either a small or a large telecom equipment manufacturer. These companies are in reality competitors to Todos and selling to these companies might involve a large risk of losing technology.

Today, as a result of increased cost awareness, many large Japanese telecom equipment manufacturers are consolidating their line of business and simpler products are imported. If these companies perceive that there is a greater advantage in procuring Todos’s products than to manufacture these types of products themselves, it could be an opportunity for Todos to
sell to these companies, most probably on an OEM basis. Since ISDN telephones have already started to penetrate the Japanese market, it can be difficult to attract the telecom equipment manufacturers. The reason for this is that the most promising products are those that are technically advanced and introduced into the Japanese market for the first time. The success of Todos in this respect depends on whether their product is sold at a considerably lower price than competing products, or if they possess a unique technological feature (e.g. this could be the e-commerce function on Todos’s products). A risk is that if a telecom equipment manufacturer perceives Todos’s product as being very competitive, a telecom equipment manufacturer might copy the know-how and manufacture a similar product. On the other hand, establishing regular sales with a large telecom equipment manufacturer can give Todos a good reputation in the Japanese market. Furthermore, Todos’s products can be sold through the telecom equipment manufacturer’s established distribution channels, and Todos can use their network for service and maintenance.

6.8.6 Create an Alliance with a Telecom Equipment Manufacturer

Strategic alliances can have various forms and involve different types of cooperation between companies. We have identified one example of a strategic alliance, which we think could be a good way for Todos to enter the Japanese telecom industry. Our suggestion for Todos is to create a strategic alliance for development purposes.

In this case it is most promising to target a small telecom equipment manufacturer since Todos can cooperate in the development of new products on equal terms. A long-term perspective is required since initially there might be a need for large investments from Todos in order to build up the cooperation. Later on, Todos could benefit from the alliance, using the Japanese telecom equipment manufacturer’s knowledge in order to become more competitive in the rest of the world. If Todos’s products are sold in Japan, the jointly developed products can benefit from the established reputation of the Japanese partner in the country.
The risk involved in a strategic alliance is that Todos has to share its technical knowledge with a Japanese company, who might copy it and thereby become a competitor. The best thing for Todos would be to find a small telecom manufacturer (preferably the same size as Todos) that already has sales in Japan and whose distribution, after-sales and maintenance network Todos could use. Since the companies would be of equal size, they would be able to cooperate on an equal basis. Targeting a telecom equipment manufacturer through an alliance does not necessarily have to involve a third part and can instead be handled directly between the two companies. Today, there are greater possibilities for Todos to seek an alliance with a Japanese company than before as the financial crisis has forced many Japanese companies to seek cooperation with foreign companies in order to get access to financial resources which help them survive in the stiff competition.

6.8.7 One or Several Alternatives at the Same Time?
A question that arises is whether Todos should pursue several of these entry alternatives at the same time or if they should focus on one. The best way for Todos to target the complex Japanese market is to be aggressive and goal oriented. Hence, we argue that Todos should weigh the pros and cons of each alternative against each other and then choose the alternative that they think is best. Thereafter they should put all their efforts into this one. It is of course possible to spread the efforts and try to find several types of partners or try to target several types of customers, but it can be very costly and demanding for a small company like Todos.

6.9 Product Considerations
In order to succeed as a foreign company in Japan it is necessary to have products that are competitive and able to challenge the market. The success of Todos’s product is to a large extent dependent on Todos’s ability to adapt the product to the Japanese requirements, and the Japanese consumers’ preferences. In this section, we will therefore present what product considerations Todos need to take.
6.9.1.1 Product Specifications
A practical issue to consider is that Todos’s product has to be adapted to the Japanese ISDN standard and conform to packaging and labelling requirements. Japanese people have a preference for wireless telephones. A recommendation to Todos would be to add this function to their ISDN telephone Surf Lite, but only if it is possible and not too expensive so that it would not harm a potential cost advantage. Furthermore, it would be an advantage if Surf Lite could be smaller compared to competing products and have features that appeal to Japanese people. (Today Todos’s product is very similar to NTT’s ISDN telephone both in size and design.) Japanese people have a special preference for small equipment.

6.9.1.2 Quality, Price and Service
If possible, Todos should try to stress the uniqueness of their product by finding an original positioning on the market, which for example can be done by offering a significantly higher level of quality or a significant price advantage compared to competitors. Todos has the possibility to manufacture products at a low cost, but a question that arises is whether this cost is lower than competitors. Todos’s strength lies in their technical knowledge, and their ability to adapt products to customers’ needs. Furthermore, offering a service package is vital for Todos. Concerning the service aspect, we believe that this is something that is impossible to handle from Sweden and therefore an important characteristic to search for in a potential Japanese partner.

6.9.1.3 Taiwanese Produced Goods
The fact that Todos has production in Taiwan is an advantage, since Japanese consumers view products from Taiwan as being of high quality. Many large, well-recognised Japanese companies have production in Taiwan in order to lower production costs, and Japanese consumers have experienced the companies’ high reliability. However, due to the fact that Taiwan for a period was under Japanese occupation, there are still some tensions between the two countries. Japanese people still tend to think of
Taiwan as “their” island, while the Taiwanese people might think of the Japanese as oppressors.180

6.10 Conclusions and Recommendations for Todos
This section is aimed to sum up the main conclusions from this chapter and state our recommendations for Todos.

6.10.1 The ISDN Market is Large but Competitive
In our analysis of the telecom industry and the ISDN market in Japan, we have found clear evidence that there is a market for the product Surf Lite in Japan. A general consideration is that the Japanese market is very competitive. A recommendation for Todos is to see this as an opportunity, since by exposing themselves to the stiff Japanese competition they will learn from the market and become more competitive on a worldwide basis.

6.10.2 How to Overcome Challenges
Todos should also be aware of the stiff Japanese competition in the telecom industry, as well as structural impediments. In order to succeed, it is preferable to be as committed and goal oriented as possible. No formal barriers exist for Surf Lite in Japan, but usually large capital investments are necessary with a payback time of approximately two years. To keep down costs, and penetrate the market relatively fast, sell on an OEM basis since brand names are very important in Japan. In order to compete against the domestic telecom manufacturers that have established distribution channels, strive for low cost and demonstrate a commitment and a will to establish long-term relationships. When considering entering Japan, weigh adaptation costs against economies of scale in order to determine whether the Japanese market can be profitable.

6.10.3 Todos Four Entry Alternatives
A partnership is the key in order to secure adaptability to the unique Japanese environment. Cooperating with a partner could also lower the

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180 Interview, Japan.
investments needed, if the partner has resources and is willing to invest in Todos’s products. The different alternatives for how to enter Japan are illustrated in the following table. The table also shows the customers that are most suitable to target for each partnership alternative, and the corresponding time perspective that Todos can have on market entry.

Table 6.2 Todos’s Alternatives

<table>
<thead>
<tr>
<th>Type of Partnership</th>
<th>Customer to Target</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent/Small Trading company (What type depends on partner characteristics)</td>
<td>Carriers: NTT if possible, Otherwise KDD or DDI</td>
<td>Short-term (OEM)</td>
</tr>
<tr>
<td></td>
<td>Retailers</td>
<td>Long-term (Own Brand Name)</td>
</tr>
<tr>
<td></td>
<td>Large Telecom Equipment Manufacturers</td>
<td>Short-term (OEM)</td>
</tr>
<tr>
<td>Alliance</td>
<td>Small Telecom Equipment Manufacturers</td>
<td>Long-term (Product Dev.)</td>
</tr>
</tbody>
</table>

Source: Own

The following section aims to sum up important aspects that Todos has to consider for each market entry alternative.

*Find a partner and target a telecom carrier:* Weigh copying risk, lost control over the sales of the product in Japan and low margins against large volumes, economies of scale and potentially fast market entry.

*Find a partner and target a retail chain:* Weigh lack of service abilities, cost and time for establishing a permanent representation and brand recognition against low copying risk and several actors to contact.

*Find a partner and target a telecom equipment manufacturer:* Weigh the product competitiveness, low margins, lost control over the sales of the
product in Japan and copying risk against relatively large volumes, many actors to target and potentially fast market entry.

*Create an alliance with a telecom equipment manufacturer:* Weigh the risk of losing know-how and the time and investments that are needed against the possibility to create a long lasting competitiveness in the world market and a good reputation in Japan.

6.10.4 Partnership Considerations
The **right type** of partner is the key for Todos in order to overcome the Japanese reluctance to do business with foreigners and cultural and language barriers. Important partner characteristics to search for in Japan are that the partner is **committed** and **trustworthy**. Furthermore, it is preferable if the partner has influential **contacts** in the telecom industry and **established distribution channels**. It is also good if the partner is able to offer **after-sales and maintenance** and has experience from the telecom industry.

6.10.5 Emphasise Strong Position in Home Markets
When targeting customers in Japan, a general recommendation is to emphasise Todos’s established sales with the biggest telecom carriers in Sweden and Norway. This will indicate high reliability in Japan, since the product is confirmed by highly regarded companies.

6.10.6 Own Representation During the First Months
Whichever entry mode and customer selected to target, have someone stationed in Japan, at least during the first months. By doing this, potential partners and customers in Japan can be approached directly and it may be a more efficient way to start up a business than relying solely on a partner. Furthermore, this will show a commitment to the Japanese market.

6.10.7 Product Recommendations
Emphasise the Swedish origin as well as the production in Taiwan, which among Japanese is associated with high quality. Adapt the product to the
Japanese ISDN standard and preferences and be sure to have service available in Japan. Since after-sales service and maintenance are of vital importance in Japan, offer complementary service over the Internet.

In order to have a competitive product in Japan, be sure to offer extremely high quality at a competitive price, since there is a large cost awareness among Japanese companies. If possible and economically beneficial, add a wireless function to the product Surf Lite.
7 CONCLUSIONS AND FUTURE RESEARCH

This chapter aims at answering our main problem, and discussing the research model in the context of what we have learnt in our case study. To be able to fulfil the overall purpose of the thesis, we will identify one or several ways for a small company to enter the Japanese telecom industry, by discussing different forms of entry modes outlined in Chapter 2.

7.1 General Conclusions

In 1985, the government initiated a deregulation process in the Japanese telecom industry that has progressed rather slowly since then. The telecom carrier NTT used to have a monopolistic position on the domestic market for telephone calls and they still have an enormous influence on the Japanese telecom industry. However, since the deregulation process started, new actors have been penetrating the market.

The telecom industry is dynamic and fast-changing, mainly due to a fast technological development pace, increased competition and trends towards globalisation and consolidation. This in turn has led to a reduction of prices for consumers. The good state of the Japanese telecom infrastructure and the investments made for the future are very promising signs for the communication capabilities in Japan. Various driving forces push the development in the industry. The main identified driving forces are the development of Internet, a change towards mobile solutions, the deregulation process and initiatives taken by the government, as well as the development of new technologies. These driving forces create new needs among consumers and thereby generate new business opportunities.
The general Japanese consumption is declining as a result of the recession, but in the telecom sector the consumption is increasing. In addition, as a result of the recession there is an increased cost awareness among Japanese companies and this has created opportunities for foreign competitors to supply low-priced products. The government has been pressured by GATT and WTO to open up the Japanese market and now the government supplies financial aid to foreign companies that want to enter Japan. Hence, there are huge market potentials for foreign companies that want to supply products for the telecom industry in Japan. However, the competition in the telecom equipment industry is very stiff, as Japan is the home to many of the world’s leading telecom equipment manufacturers. Therefore, foreign suppliers should preferably deliver products of high quality that are unique in some sense and at a lower price than Japanese competitors.

Even though the government has started to open up the Japanese telecom industry to foreign competition, the process of going into Japan is still rather expensive and time consuming, compared to going into other countries. The outcome of our research has resulted in the conclusion that it is difficult to overcome the strategic impediments in the telecom industry, unless a company is committed to invest time and money in aggressively targeting the market. If a foreign company is unknown in Japan and does not have an established brand name or established contacts and relationships, it can be difficult to penetrate the market and reach customers on its own.

We have identified a number of entry modes that a small company can pursue in order to enter the telecom industry in Japan, and in the following figure we will outline their various pros and cons (for a more detailed description of various entry modes we refer to Chapter 6, section 6.6).
### Table 7.1 Pros and Cons of Various Entry Modes

<table>
<thead>
<tr>
<th>Entry mode</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Send Home-based People Abroad</strong></td>
<td>Possibility to build brand recognition; Higher margins when selling under own brand name; Create personal relationships with customers; Knowledge of the market.</td>
<td>Slow market entry; High cost, in particular for overseas sales branch; High risk compared to cooperating with partner.</td>
</tr>
<tr>
<td><strong>Agent</strong></td>
<td>Access to knowledge and customer base; Limited initial investment needed; Potential for fast market entry; Established marketing channels and potential help with service and maintenance; Low risk.</td>
<td>Risk of lack of commitment and motivation from an agent; Limited access to market information; Possible lower commitment to the market; Does not build an own knowledge of the market.</td>
</tr>
<tr>
<td><strong>Distributor &amp; Trading Company</strong></td>
<td>Access to knowledge and customer base; Limited initial investment needed; Potential for fast market entry; Established marketing channels and potential help with service and maintenance; Low risk.</td>
<td>Risk of lack of commitment and motivation from an distributor; Limited access to market information; Possible lower commitment to the market; Trading companies sell several companies’ products, can be low involvement in each; Can be difficult to come in contact with distributors, since they sometimes buy their products through trading companies.</td>
</tr>
</tbody>
</table>
Table 7.1 Pros and Cons of Various Entry Modes (continued)

<table>
<thead>
<tr>
<th>Entry mode</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Alliance</strong></td>
<td>Possibility to get a competitive advantage by cooperating with a skilled Japanese company; Can take advantage of a partner’s reputation and reliability.</td>
<td>Risk of loosing know-how; The cost of establishment can be higher.</td>
</tr>
</tbody>
</table>

Source: Own

A company has to weigh the various pros and cons against each other in order to evaluate what best suits the purpose of the specific company. The different entry modes also depend on what type of customer is targeted and how difficult the customer is to establish sales with. In fast-changing industries there is often a risk of losing technology and this is also a determining factor when choosing the entry mode.

In order be able to choose between the various entry modes outlined above, it is important for a company that wants to supply products to the Japanese telecom industry to take the time perspective into consideration. If the company is dependent on one single product and wants to achieve quick sales, it is most suitable to use an agent or a distributor/trading company as a “helping hand” at an initial stage, and instead open up a presence after a while. On the other hand, if the company has a more long-term view of the Japanese market, establishing a strategic alliance or a presence in the country from the very beginning can be more profitable in the long-term. The figure below illustrates the cost and potential profits and the time perspective of various entry modes.
In a short-term perspective, the best way for a small company to overcome the challenges when entering Japan is to get assistance from a Japanese agent or a distributor/trading company. This is especially relevant in the fast-changing telecom industry, where companies are dependent on achieving fast sales. The type of partnership that is most suitable depends on the specific case. One of our main conclusions is that generally, the type of partnership company to cooperate with is subordinate to the qualities of the partner. Important qualities are that the partner has the right relationships and contacts and access to distribution channels through which end-consumers could be reached. It is also important that the partner is reliable and that he is committed to the task of selling the small company’s products and able to invest in order to achieve sales.
Furthermore it is an advantage if the partner has the possibility to offer service and maintenance.

Creating a strategic alliance is another way of establishing a partnership. This requires a long-term perspective from the very beginning of the operations and may be a suitable option for a small foreign company that feels that it lacks some necessary skill, which it could get access to in an alliance with a Japanese company. Creating an alliance could also be seen as a way for a small foreign company to increase its competitiveness on the world market by learning from a Japanese partner.

In a longer-term perspective it could be good for a small company to establish some kind of presence in Japan in order to create awareness of the company and to contact customers more efficiently. This is particularly valid if the company has several products that it wants to launch. We think that to open up a more permanent presence in Japan could be a suitable approach after a certain time, when the foreign company has managed to establish sales in Japan, and therefore can be more certain that it will get a return on its investment. However, in the beginning of its establishment in Japan (e.g. the first six months) a foreign company, in addition to an assisting partner, should send its own employee to Japan in order to more efficiently start up the business. Local presence of a key person, who can represent the company and take important decisions, is especially important in fast-changing industries, where it is vital to be able to respond quickly to requirements in the environment.

7.2 Conclusions of the Theoretical Model
In order to take a holistic approach to the choice of establishment strategy, we combined Jansson’s network theory with our own model for industry analysis. The discussion of the characteristics of the macro and micro environment was aimed to provide a base for the choice of establishment strategy and they were combined into an integrated research model (see model 2.8). By considering the conclusions that we have drawn from our
research, this section aims to evaluate our industry analysis model and integrated research model and discuss suggestions for improvements.

### 7.2.1 Conclusion of the Industry Model

The industry has been the central and most important part of our study. The reason why we had this perspective was our case company’s preferences, as well as our assumption that the industry has a strong influence on a company that wants to enter a country. The lack of relevant theories, meant that we developed our own model for industry analysis (presented in section 2.3) intended for small companies in fast-changing industries.

The purpose of the model has been to act as a tool in understanding the industry logic. Our assumption has been that the most important factors to understand are the industry structure, the industry development and the specific market to compete within. In our model, these three factors had equal importance. However, after having conducted our field study we have come to the following conclusions.

Having knowledge of how the industry is *developing* is of greater importance than having knowledge of the *structure* of the industry. The industry structure is aimed to give a picture of the industry situation today. However, in fast-changing industries, the structure rapidly becomes out of date. For a company active in these types of industries, it is of greater importance to have an understanding of what drives the industry, since this knowledge can be used in order to predict how the industry structure will develop in the future. With this knowledge, companies can take advantage of new trends or take preventive actions against future threats. A way of modifying our model could therefore be to give less importance to the section industry structure.

The approach to investigate both the industry in general as well as the specific market has given us an overview of the industry and a deeper insight into the specific market. The conclusion is that this approach has
given us an overview of what determines the characteristics of the specific market, and we have been able to provide a well-founded base for decision-making. The case study has shown that by investigating the telecom industry in general, we could better understand the specific market for ISDN. The reason for this is that markets within industries are never isolated. An example is that the development of Internet, which is a major driving force in the telecom industry in general, also determines the development of and the demand for ISDN.

The model is mainly aimed to describe the present status of the industry. However, since the model is designed to evaluate dynamic industries, which change quickly, taking the time perspective into consideration might strengthen it. Our suggestion for how this could be done is to add a “future market potential” box, which is dependent on the industry development, the specific market and the market actors. Our industry analysis model with suggestions for improvements is shown in the following figure.
7.2.2 Conclusion of the Integrated Research Model

Our research model described in section 2.7 consists of three different parts: the macro environment, the microenvironment and establishment strategy.

Throughout the research, we have felt the value of taking the macro environment into consideration. We used Jansson’s network theory for this analysis, but other theories, such as e.g. PEST, could have been used.
instead. However, the main advantage of using an institutional approach is the possibility to penetrate the environment in depth and gain knowledge of how it influences the company.

It is important to discuss whether the macro environment and the micro environment are the only factors that determine what kind of entry strategy to pursue. We argue that the specific company is also an influential factor when choosing a suitable entry mode since it constitutes the base for what is possible to do in a specific country. We have not taken the company’s resources and capabilities into consideration mainly due to the vast research this would have required. Hence, we suggest that a possible modification of our research model would be to add an investigation of the internal environment of the company.

7.2.3 Generalisation?
In our analysis of the Japanese macro environment, we selected which institutions to analyse according to our purpose. However, when describing and analysing the various institutions we had a general approach and therefore we think that our findings in this part can be highly useful for other companies that want to enter the Japanese market.

Since we have not taken the internal environment of our case company into consideration when conducting our research, we think that the findings from our study can be generalised to other companies that want to enter the telecom industry in Japan. However, if a company is active within another market segment than the ISDN market, one important difference is that the specific market for that company has to be investigated.

The various entry modes that are suitable for a company to use, in order to enter a new market, are dependent on factors in the macro environment and the micro environment and therefore the recommendations of which entry modes are suitable are difficult to standardise concerning various countries and industries. We believe that our analysis of various entry modes is
possible to apply more generally to small companies that want to enter the Japanese telecom industry.

However, it is important to emphasise that there might be a risk of drawing these conclusions from a single case study, and to be able to generalise as to the usefulness of our model there is a need for it to be tested in other case studies, as well. This leads us to the next and last section where we will discuss areas for future research.

7.3 Future Research Areas
In our research model we have excluded one aspect, which is important to take into consideration when deciding on an establishment strategy for going into a new country, and that is the internal environment of the company. We have left the decision for Todos to compare our recommendations for how to get established in Japan, with an investigation of Todos’s internal resources and capabilities.

We have limited our research to identifying various modes of entry and their pros and cons. We have felt that specific characteristics of the partner are as important as the specific type of partner. A problem area that is widely discussed, and in which limited research has been made today, is how to find and choose a suitable partner. A further development of our study could be to examine this subject more thoroughly.

A way of improving our model could also be to focus even more on the dynamics of the industry and try to integrate the time perspective. We have not made any scenarios, even though this might have been relevant in fast-changing industries. The reason why we have not done this is because the purpose of our study has been to investigate the present situation. A future research area is, therefore, to make predictions, for example through scenarios. Furthermore, due to the fact that the industry is in constant change, an on-going investigation of the telecom industry is required.
BIBLIOGRAPHY

BOOKS


OTHER PUBLICATIONS


JOURNALS AND ARTICLES


ANNUAL REPORTS


INTERNET SOURCES

CIA’s Homepage:
Encyclopedia Britannica’s Homepage:
IDO’s Homepage: http://www1.ido.co.jp.
IMF’s Homepage: http://www.imf.org/external/np/sec/pn/1999/PN9975.HTM.
KDD’s Homepage: http://www.kdd.co.jp/service-e/isdnc/chapter7.html.
NTT’s Homepage: http://www.ntt-west.co.jp/ISDN/.
Swedish Trade’s Homepage: http://www.swedishtrade.se/japan/.
Telia’s Homepage: http://www.telia.se.
Todos’s Homepage: http://www.todos.se.
OTHER SOURCES

Todos Internal Material, January 7, 2000.
Todos Sales Material, September 28, 1999.

INTERVIEWS IN SWEDEN

TomAB

Comtech Corporation

Ministry for Foreign Affairs

Swedish Trade in Stockholm
Bodil Prising, Former Trainee at Swedish Trade in Tokyo, September 23, 1999.

Impentab
Svante Rösman, Manager, October 4, 1999.

Todos Data System AB
Per Skygebjerg, Sales & Product Manager, October 14, 1999.

INTERVIEWS IN JAPAN

Micronic Data Systems AB
Magnus Råberg, Assistant Manager, Sales Display and Packaging, October 24, 1999.

Electrolux Japan
Thord Kyhlstedt, President, October 25, 1999.

The European Institute of Japanese Studies (ELIS)
Atsushi Hasegawa, Director Tokyo Office, October 25, 1999.

Japan External Trade Organisation (JETRO)
Hirokazu Fukue, Trade Advisor, Business Support Center, October 26, 1999.
Fuki Okada, Support Staff, Business Support Center, October 26, 1999.
Nippon Ericsson K.K.
Lars Boman, Vice President, October 28, 1999.

Gadelius
Hans-Bertil Håkansson, President and CEO, Gadelius K.K., October 28, 1999.
Göran Holmquist, Chairman, November 3, 1999.

NTT Communications Corporations
Masahiro Ikegaya, Deputy Associate Manager, Sales & Marketing Department, October 29, 1999.
Shigeki Aihara, General Manager, Leased Circuit Network Engineering Center, October 29, 1999.
Haruhiko Konno, Associate Manager, Sales & Marketing Department, October 29, 1999.

Nippon Hoso Kyokai (NHK), Broadcasting Culture Research Institute
Yoshiko Nakamura, Senior Media Researcher, Media Analysis Division, November 1, 1999.

Embassy of Sweden in Tokyo, Science & Technology Office (STATT)
Per Hjerten, Senior Analyst in IT, Electronic Commerce, Telecom, Electronics, November 1, 1999.

Sweden Food and Forestry K.K.
Tommy Kullberg, President, November 2, 1999.

Communication Industry Association Japan (CIAJ)
Hideki Yagi, Vice President, Overseas and New Markets Department, November 3, 1999.

EXHIBITIONS AND SEMINARS

Partnership Seminar
Organised by Impentab at Hotel Rubinen, Göteborg, September 16, 1999.

COM JAPAN 99
Telecom Exhibition at Tokyo Big Sight, Tokyo, November 3, 1999.

NTT Multimedia Center in Tokyo
Guided Tour and Study Visit in NTT’s Show Room, Tokyo, October 29, 1999.
APPENDIX 1: TODOS’S ORGANISATION CHART

APPENDIX 2: AREAS OF DISCUSSION: INTERVIEWS IN SWEDEN

Michael von Brömssen and Patrick Strauss (ISDN Specialists)
- ISDN in general
- Pros and cons with ISDN
- Substitute technologies for ISDN

Toshiharu Sato (Japanese visiting in Sweden)
- The Japanese culture
- Japanese attitudes towards foreign companies and foreign goods
- Entry barriers
- The telecom industry
- The Japanese distribution system
- Partnerships in Japan

Bodil Prising (Former trainee at Swedish Trade in Tokyo)
Jörgen Frotzler & Göran Livbrandt (Ministry for Foreign Affairs)
- Japanese culture
- The Government’s role in business
- Laws and regulations for foreign companies in Japan
- The telecommunication infrastructure
- The Japanese distribution system
- Experiences and examples of companies entering Japan
- Entry barriers in Japan

Svante Rösman (Specialist in Partnerships)
- Examples of companies that have used a partnership
- Problems, mistakes, risks, advantages
- Differences between different types of partnerships
Per Skygebjerg & Emma Nordlund (Todos Data System AB)

- Todos’s current strategy
- Major export markets
- The Partner in Taiwan
- Todos’s resources
- After-sales services and maintenance
- Strengths and weaknesses
- Todos’s competitive advantage compared to competitors
APPENDIX 3: INTERVIEW GUIDE: TOKYO

Areas of Discussion
(Japan 22 October – 5 November)

The Telecom Industry
Telecom history and development
Actors
Laws and regulations
Driving forces and trends
Future development

The ISDN Market
The development of Internet in Japan
ISDN subscription suppliers in Japan, market share, market coverage
Current development of ISDN
Number of ISDN subscribers in Japan today
The price of ISDN in Japan
The growth of ISDN in Japan

Customers
Buyers of ISDN products
Procurement policies
End-consumer preferences for ISDN products
Where consumers buy ISDN products in Japan

Competitors
Existing ISDN products in Japan
Actors supplying ISDN products in Japan

Intermediaries
The distribution of telecom equipment
Allocation of profits and margins in the distribution system
Substitute technologies
Existing techniques in Japan for transferring information
Trends and growth projections

Entry Modes
How the interviewee’s company entered Japan
Considerations when choosing specific entry mode
Main advantages/disadvantages with different entry modes in Japan
Risks with different entry modes
Control with different entry modes

Entry Barriers
Experience from entry barriers when entering Japan
Formal barriers when entering Japan
Formal entry barriers specific to the telecom industry
Other barriers, apart from formal barriers (hidden barriers)
“Hidden” barriers specific to the telecom industry
APPENDIX 4: ECONOMIC INDICATORS IN JAPAN


Source: The World Economic Factbook, Euromonitor 1998 & OECD
Exchange Rate

Year

Source: Main Economic Indicators, OECD Statistics, July 1999, OECD Publications
APPENDIX 5: NTT’S PRICES FOR ISDN IN JAPAN TODAY\textsuperscript{181}

The costs presented below were valid in November 1999. It is important to bear in mind that the prices for ISDN are changing very rapidly. The costs for ISDN subscriptions can be classified into three types of costs: one-time fees, installation fees, and monthly charges.

<table>
<thead>
<tr>
<th></th>
<th>INS-Net 64 Lite</th>
<th>INS-Net 64</th>
<th>INS-Net 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One-time fees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone line deposit</td>
<td>¥0</td>
<td>¥72,000</td>
<td>¥102,000</td>
</tr>
<tr>
<td>Contract charge</td>
<td>¥800</td>
<td>¥800</td>
<td>¥800</td>
</tr>
</tbody>
</table>

**Installation fees**
- Installation charge: From ¥2,000 to ¥20,000 (Differs depending on the installation needed)

When NTT carries out installation they also charge a Telephone Exchange Work Fee, Inside Wiring Installation Fee, and Terminal Equipment Installation Fee.

<table>
<thead>
<tr>
<th></th>
<th>INS-Net 64 Lite</th>
<th>INS-Net 64</th>
<th>INS-Net 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monthly fees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business use:</td>
<td>¥4,270</td>
<td>¥3,630</td>
<td>¥31,000</td>
</tr>
<tr>
<td>Residential use:</td>
<td>¥3,470</td>
<td>¥2,830</td>
<td>¥31,000</td>
</tr>
<tr>
<td>Inside wiring usage charges:*</td>
<td>¥60</td>
<td>¥60</td>
<td>¥3,000</td>
</tr>
<tr>
<td>Connecting Equipment:</td>
<td>¥1,700</td>
<td>¥1,700</td>
<td>¥12,000</td>
</tr>
<tr>
<td>Usage Charges:*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone call charges:</td>
<td>same rate as for analogous line</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\* = Necessary when renting NTT equipment
(Consumption Tax is not included in the above prices)

\textsuperscript{181} NTT’s Homepage (http://www.ntt-west.co.jp/ISDN/), October 15, 1999.
Additional Costs\textsuperscript{182}

Additional phone number: ¥900 per month
Equipment costs (see Appendix 6)

Below there is a comparison of monthly charges for ISDN and analogous lines for residential use.\textsuperscript{183}

\begin{tabular}{|l|c|}
\hline
ISDN & 2,830 yen \\
Two Analogous Lines & $(1,750+390) \times 2 = 4,280$ yen \\
Difference per month & -1,450 yen \\
Difference per year & -17,400 yen \\
\hline
\end{tabular}

\textsuperscript{182} Lieu, October 1997.
\textsuperscript{183} Brick’s Homepage (http://bricks.gol.com), November 15, 1999.
APPENDIX 6: TELECOM ACTORS

Leading Type 1 Telecommunications Carriers

Nippon Telegraph and Telephone Corporation (NTT)
Kokusai Denshin Denwa (KDD)
Daini Denden Inc. (DDI)
International Digital Communications (IDC)
Japan Telecom
Teleway Japan Corp. (TWJ)
Japan Satellite Systems (JSAT)
Space Communications Corp. (SCC)
International Telecom Japan (ITJ)
Kansai Cellular Telephone

Leading Japanese Telecom Equipment Manufacturers

NEC Corp.
Fujitsu Limited
Oki Electric Industry
Hitachi
Toshiba Corp.
Mitsubishi Electric Corp.
Sony Corp.
Pioneer Electronic Corp.
Matsushita Electric Industrial
Sharp Corporation
Sanyo Electric

Foreign Manufacturers in Japan

Northern Telecom Japan
Nippon Motorola
Panduit Corporation Japan Branch
Picturetel Japan K.K.
Siemens K.K.
Alcatel ITS Japan
Nippon Ericsson K.K.
Nokia Mobile Phones (Japan) K.K.

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184 JETRO, March 1996.
APPENDIX 7: PRICES FOR ISDN EQUIPMENT\textsuperscript{185}

TA’s and DSU’s were very expensive in the early 1990s, but the prices have recently dropped slightly.

**TA/DSU Market Prices (A computer store in Tokyo March 1999)**

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Retail Price</th>
<th>Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEC Aterm IT60DSU</td>
<td>35,800 yen</td>
<td>27,400 yen</td>
</tr>
<tr>
<td>NEC Aterm IT75DSU</td>
<td>42,800 yen</td>
<td>32,600 yen</td>
</tr>
<tr>
<td>Suntac TS128JX/D</td>
<td>49,800 yen</td>
<td>29,800 yen</td>
</tr>
</tbody>
</table>

**Dial-up Router Market Prices (A computer store in Tokyo March 1999)**

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Retail Price</th>
<th>Selling Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTT-TE Tokyo MN128-SOHO</td>
<td>69,800 yen</td>
<td>41,800 yen</td>
</tr>
<tr>
<td>YAMAHA RTA50</td>
<td>49,800 yen</td>
<td>37,800 yen</td>
</tr>
<tr>
<td>Fujitsu NetVehicle fx3</td>
<td>68,800 yen</td>
<td>43,800 yen</td>
</tr>
</tbody>
</table>

\textsuperscript{185} Brick’s Homepage (http://bricks.gol.com), November 15, 1999.
## APPENDIX 8: RETAILERS IN JAPAN

<table>
<thead>
<tr>
<th>Consumer Electronics</th>
<th>Head Office</th>
<th>Sales (million yen)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chains</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kojima Co.</td>
<td>Tochigi</td>
<td>301,610</td>
<td>8,6</td>
</tr>
<tr>
<td>Best Denki Co.</td>
<td>Fukuoka</td>
<td>255,578</td>
<td>-9,7</td>
</tr>
<tr>
<td>Joshin Denki Co.</td>
<td>Osaka</td>
<td>224,808</td>
<td>-9,7</td>
</tr>
<tr>
<td>Deodeo Corp.</td>
<td>Hiroshima</td>
<td>205,790</td>
<td>-7,9</td>
</tr>
<tr>
<td>Yamada Denki Co.</td>
<td>Gunma</td>
<td>162,055</td>
<td>28,1</td>
</tr>
<tr>
<td>Laox Co.</td>
<td>Tokyo</td>
<td>141,707</td>
<td>-2,2</td>
</tr>
<tr>
<td>Ado Electronic Industrial Co.</td>
<td>Tokyo</td>
<td>132,304</td>
<td>14,0</td>
</tr>
<tr>
<td>Matsuyadenki Co.</td>
<td>Osaka</td>
<td>127,401</td>
<td>-5,6</td>
</tr>
<tr>
<td>Sofmap Co.</td>
<td>Tokyo</td>
<td>117,712</td>
<td>-4,0</td>
</tr>
<tr>
<td>Wako Denki Co.</td>
<td>Osaka</td>
<td>107,001</td>
<td>-9,0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Camera Shops</th>
<th>Head Office</th>
<th>Sales (million yen)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yodobashi Camera</td>
<td>Tokyo</td>
<td>238,450</td>
<td>6,8</td>
</tr>
<tr>
<td>Bic Camera Co.</td>
<td>Tokyo</td>
<td>137,502</td>
<td>7,3</td>
</tr>
<tr>
<td>Kitamura Co.</td>
<td>Kanagawa</td>
<td>71,967</td>
<td>13,7</td>
</tr>
<tr>
<td>Doi Co.</td>
<td>Fukuoka</td>
<td>25,276</td>
<td>-7,6</td>
</tr>
<tr>
<td>Koide Camera</td>
<td>Tokyo</td>
<td>10,942</td>
<td>5,6</td>
</tr>
<tr>
<td>Amano Co.</td>
<td>Aichi</td>
<td>8,970</td>
<td>-2,3</td>
</tr>
<tr>
<td>Asahida Camera</td>
<td>Aichi</td>
<td>7,900</td>
<td>16,3</td>
</tr>
<tr>
<td>Mutsumi-do</td>
<td>Kyoto</td>
<td>4,939</td>
<td>2,0</td>
</tr>
<tr>
<td>Fujiya Camera Co.</td>
<td>Tokyo</td>
<td>4,339</td>
<td>26,9</td>
</tr>
<tr>
<td>Tanaka Camera Co.</td>
<td>Fukushima</td>
<td>4,250</td>
<td>-6,6</td>
</tr>
</tbody>
</table>

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