INTERNET – A SALES CHANNEL IN THE AIRLINE INDUSTRY

DECISION SITUATION, RELATIONSHIPS, ADDED VALUE, AND FINANCIALS

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INTERNET - A SALES CHANNEL IN THE AIRLINE INDUSTRY

Title of series, numbering

Title
INTERNET - EN SÄLJKANNAL I FLYGBOLAGSBRANSCHEN
INTERNET - A SALES CHANNEL IN THE AIRLINE INDUSTRY

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Abstract
The social change, with Internet as one of its innovations, is changing the way business is conducted. The main objective is to study and get a better understanding of the use of Internet as a new sales channel when there already exist a sales channel including middlemen. A description is made covering the decision situation and three areas that are affecting the decision - relationships to the middlemen, added value in the channels, and financials.

European airlines as represented in Sweden and US airlines were interviewed. For explorative purposes interviews have been made with travel agents. No primary data is collected from the travel customers. Security issues and other barriers for Internet adoption are not studied.

The conclusion of the study is that managers should focus on action more than "rational decision making". If the middlemen will be bypassed it is important to communicate with them. It is also necessary to have upper management's support. One of the driving forces for implementing Internet as a sales channel in the airline industry is to create customer ownership. Three generic formats for doing so is identified - learning relationship, vertical facilitator, and meta intermediary.

Keyword
Internet, network economics, middlemen, cannibalization, distribution channel, customer ownership, investment, added value.
Executive Summary

This report covers the decision situation of a producer when confronted with the question whether to use Internet as a new sales channel or not. Three areas of consideration in that decision are: The relationship to the intermediaries, the added value in the traditional channel versus the Internet channel, and financials.

The study examined these issues in the airline industry. The traditional sales channel in the airline industry includes two intermediaries between the airline and end customer. The first is the GDS (Global Distribution System), there are four dominating actors in the world; Worldspan, Amadeus, Sabre, and Galileo. They serve as aggregators of offered tickets from a large number of airlines. The second intermediary, the travel agent, is connected to a GDS and gain access to flight and ticket information through it.

Characteristics of the airline industry include:
- Low differentiated commodity product with high service content.
- High competitiveness among incumbent companies.
- Low margins, 1-2% net profits versus 5% for the average industry in the US.
- High capital intensity.
- High information intensity, (both the value chain and content of the product).

The airline industry has gone through a change process beginning with the deregulation of the market. This happened in 1978 in the US, and in 1990 in Europe. This lead to increased competition on flight routes. Since the industry became an almost perfect market, with the airlines as price takers, no single airline could increase its prices due to the competitive pressure. Cost cutting was the only way to increase an airline’s profit. Internet emerged as a way of reducing the sales costs, counting for 14% of the total costs in 1997 the third largest cost of an airline. Cost reduction was the prime reason for the implementation of the Internet direct channel. Up to 80% of sales costs has been saved, the most on commissions. Secondary reasons were changing customer demands, efforts to get closer to the customer, and competitors’ moves. Some airlines have reached break-even, operationally and including the investment.

Intermediaries generally perform a number of functions: They engaged in market communication promoting the product and brand to the customer. The search and evaluation of information on the product alternatives is facilitated. The intermediary sometimes keeps inventory. They often execute the physical distribution of the product to the end customer. The transaction of payment, and
post-sales support are also normal services of the intermediary. A new sales channel such as Internet has to attend to all of them in some way.

Since Internet essentially is a way of handling information flows, the search and evaluation conducted by the customer becomes of special interest in the Internet channel. It could be a way of offering superior value if it is administered in a better way compared to the traditional indirect channel. In that way, it could justify a price premium. This study has identified four ways Internet can be used in this part of the purchasing process.

The first one is as a \textit{vertical facilitator}, which helps the buyer choosing from a set of products in an industry by using attribute and decision rules. An example in the airline industry with an approach resembling it is United Airlines. The second is as a \textit{meta intermediary}, which take the starting point in the activities the consumer relates to each other in his/her mind. These are not limited to one industry, therefore the meta intermediary works across industries when helping the buyer to satisfy needs, e.g. Microsoft’s Expedia. The third is in the \textit{learning relationship}, which uses the information from the buyer to alter the product itself and customizes it. Only one product owner is involved in this case. American Airline has taken on a path leading to this approach. These three alternatives can all create customer ownership, however the level of product ownership differs. The GR matrix illustrates these relationships. The fourth and last alternative, \textit{information contagion}, does not primarily involve an information flow between the buyer and seller. Instead, previous buyers provide the prospective buyer with feedback on their consumption experience. Especially “experience goods” could benefit from the implementation of this mechanism since they are hard to evaluate before usage.

Lessons learned from this study include: The necessity of upper management support. Focus should be on action and not analysis in spite of the uncertainties. Issues with back-end and support functions often create surprise costs in an Internet venture. The profitability assessment of the investment in the Internet channel should consider future possibilities, “IT-options”, brought by the implementation. These could bring substantial benefits. While the intermediaries can be eliminated, the functions they perform cannot. Even if the Internet channel imply bypassing the intermediaries, the pursuit of the possibilities the new technology bring should not be halted. Extensive and sincere communication with them before and during the implementation can limit the perceived conflict. After some time, the relationship can be expected to ease.
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1 Introduction

This chapter will provide the reader with a short introduction to the subject we have chosen – the decision to implement Internet as a new sales channel. This results in a problem discussion and the main objective of the study. From the discussion, the suitability of studying the problems within the airline industry and their sales of tickets evolves.

-It says here, the Internet is the future of business.

-We have to be on the Internet.

-Why?

-Doesn’t say...

(IBM TV-commercial broadcasted in Sweden 1998)

Each one of us always faces decisions in life, both work related and personal. Organizations need to, more than ever, make a choice among the alternatives and decide without delay. Sometimes organizations even have to make decisions regarding a goal that already have become obsolete since new goals are required that are rendered by the rapid environmental and technological changes. This situation becomes even more apparent with information technology and the emergence of Internet. When managers decide to use Internet as a new sales channel they are often confused by the way the boundaries of competition and strategic thinking are expanding in the new information economy. This often results in a failure to implement an effective on-line strategy. The organizations that succeed understand that an effective e-commerce strategy has to be integrated with the organization’s strategic vision as a whole. (Plant & Willcocks, 1999) This is supported by Hedman & Pappinen (1996), Internet influence the whole structure of the organization and managers cannot ignore it. They need to consider what the effects are on the organization, but also how other related organizations will be affected by this decision.

1 Electronic commerce is any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact, (What is electronic commerce, 1999)
In broad terms, this report deals with the decision situation an organization face when it is about to decide if Internet should be implemented as a new sales channel. It also goes into depth in underpinning factors of the other three themes; relationships in multiple-distribution channels, the different value added in the traditional distribution channel and the Internet distribution channel, and the financials.

1.1 Background

Major changes are happening now in the societal structures as we are entering the era of Information Age. These changes are supported by and in part driven by information technology and the introduction of Internet. As Internet is an electronic medium that facilitates a multi-way communication between computers and networks it allows anyone to have a 24-hour-a-day presence. It offers organizations the ability to provide information, customer support, on-line sales and customer feedback. (Pitt et. al, 1996). Today, the question is no longer whether e-commerce will occur, rather how widely and fast it will spread (Kalakota & Whinston, 1996). It is in this context this report is produced.

1.1.1 Social structures

“Simply put, fiber to the home, school, and business in an essential infrastructure for economic development in the Information Age of the twenty-first century, just as railroads were in the last century, and highways were in this century. As the economy shifted from agrarian-based to industrial-based, our ability to move goods via railroads at first, and highways later, proved essential. Now we are shifting toward a service-base economy in which the ability to transport information will prove essential.” (Senator Ernest Hollings 1990 Benjamin & Wigand, 1995)

Historically the society has gone through many stages due to revolutionary changes that involve overall changes in the society structures. The change from being in an agriculture age to today’s industrial age, people moved into the cities and the production factor capital became more important than land. (Arnbor & Bjerke, 1994) According to many authors we are now entering a new age which
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has been called many names, e.g. Knowledge age or Information age and is partly driven by new customer needs and desires and people demanding stimulated work tasks. (Lowendahl & Revang, 1998) It is characterized with an increased signification of knowledge, rapidly advancing computer power, and communication. Knowledge has been widely recognized as the new, fourth production factor in the new era, after the classical ones; labor, land, and capital. (Lang & Whinston, 1999) The statistics show that the products exported from USA measured in weight have decreased, while the value has increased. This is seen as proof of increased knowledge content in products. (Kelly, 1998). The new era brings forward new heroes like Linus Torvalds, creator of Linux (Malone & Laubacher, 1998; Talacko, 1998; Fröjd & Lundström, 1999) and new success businesses: AOL has become the highest valued media company, worth more than Disney, Viacom and CBS combined (Waters, 1999). Microsoft has replaced General Electric as the world’s most valued firm according to the FT500 (Dickson M, 1999). But, the new information age is only in its infancy, recall how people thought the industrial revolution was already history while it actually just had started (Taylor, 1999b). Since the information age just started to evolve, the ideas of Network Economics has not yet risen to public awareness. We believe it will have broad impact on the way business is conducted, therefore it is introduced below.

1.1.2 Network Economics

Some authors argue that the old rules of economics no longer apply now when we are entering the new societal stage, with Internet as one of its inventions. The new era, Information Age, has its own opportunities and threats that will affect organizations’ future business and profits. Kevin Kelly (1998) argues that it is a new economic order with a whole new set of business rules that are introduced. He claims that:

“…those who play with the new rules will prosper, while those who ignore them will not.” (Kelly, 1998, p 1)

Three different kinds of returns are possible: Diminishing returns, which are the assumption in traditional textbook economics. Constant returns are related to e.g. technologies that are unaffected by adoption. Increasing returns are the focus in network economics as well as the way value is amassed. The increasing

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2 Societal changes due to information has though taken place before. There are those who argue that the first “information age”, some 6000 years ago, was the most revolutionary (Hobart & Schiffman, 1998).
returns give advantages to the market leader in a different way than the economies of scale, which is about the cost side of the business. (Arthur, 1989).

Brian Arthur's (and others) work on increasing returns and path dependency “builds a bridge between evolutionary economics and marketing” (Dickson P, 1995, p 97). The ideas of network economics have received reactions ranging from “too new” to “what’s new?” (Dickson P, 1995). Because of that, we find it important to both describe these theories for readers not familiar with them. Also to, as authors, declare a personal stance towards them.

Network economics can be used for understanding adoption of new technology, technology standards competition, and communication networks economy. One of the unorthodox ideas of network economics is e.g. how value relates to quantity of products on the market. According to the classical microeconomics the value of a product increases when the supply is limited, e.g. the limited supply of gold makes it highly valuable, while water is ubiquitous and therefore cheap. However, in the new network economy value increases when supply is manifolds. The reason is that the number of users affects the utility the individual user gets from the product or service. A common example on the idea is the fax machine: How much is the first fax machine available worth to the consumer? The answer is “zero” – there is no one else to send a fax to. When the ownership of fax machines is widely spread the value increases significantly. Thus, when supply is plenty the value increases. (Kelly, 1998). The concept of network economics is captured with Katz and Shapiro’s statement:

“There are many products for which the utility that an user derives from consumption of the good increases with the number of other agents consuming the good”. (Katz & Shapiro, 1985, p 424).

1.1.3 Relevance of Network Economics

Three characteristics are the basis of the new societal stage: First, it supports intangibles like information, brands, relationships and copyrights. Second, it is truly global. Third, the interlinkage is intense and fast developing. One estimate is that by 2002 about half of the Internet connections, which then will count to 200 million, will be “information appliances”, e.g. microwave ovens combined with computers (France, 1999). Another vision is that “jelly bean” chips will be included in shirts, hammers and other simple products (Kelly, 1998). These already exist and are of 1 mm² size with capability to transmit short-range radio signals (Taylor, 1999a). This means that the relevance of network economics will be expanded into new areas and gain more importance to the total economy.
1.2 Problem Discussion

During the following problem discussion, important questions will be raised around the four themes; the decision situation, relationships in multiple channels, added value, and financials. Some of these questions will be brought together in a summery of the problem discussion and not answered separately in this report. This will end with the main objective with this thesis.

Since Internet is such a new phenomenon, it is important to find empirical data from industries that are ahead of others in adopting Internet as a new sales channel. Therefore, we have chosen to make our empirical research within the travel industry with the perspective of the airline. However, the discussion that follows next will treat the problems in general terms and not from any specific industry context.

1.2.1 The Decision Situation

The decision situation is including subsections, change and the decision process. This to ease the understanding for managers when they face similar circumstances. The decision situation is also the starting point for our problem in the research.

Change

The societal change makes it difficult to neglect the presence of information technology, with Internet being one of the more dominant novelties (even if it has existed since the 1960s, it is a young arena for business, see appendix 2). Kevin Kelly (1998) compare Internet’s impact on organizations with the switch from barter trade to using money, it affects all organizations and the way they function. Therefore, it is impossible to ignore for any organization and still stay in business. How do managers in organizations perceive this change, revolutionary or incremental? Do organizations try to lead this change, a proactive approach, or do they let the change happen and then react to it? Internet is one expression of the evolving Information Age, its adoption among users has taken place at a until now unseen speed compared to any media, (Morgan Stanley, 1999). This, together with the overhauling implication it has to

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3 4.1.2; 4.3.6; 4.4.3; 4.4.4; 4.4.5
all businesses makes the change unique in character. But, are there any barriers for adopting Internet as a new sales channel? There are few studies done of changes so radically and rapidly affecting businesses. In our view, research on this specific change can therefore contribute to the understanding of the change phenomenon.

Decision
Managers of today face powerful worldwide opportunities and threats in their everyday work. They need to consider the impacts and implications these have on their organization and take different actions depending on how it will affect their way of conducting business. Decisions need to be made where managers need to use judgment, evaluation and insights into the problems they face. Decision making involve many complex factors: First, managers need to identify and understand the problems occurring, second, examine different alternatives and last choose one of them, all this to reduce the uncertainty. (Laudon & Laudon, 1997) Some decisions are more important than others, especially in the areas of strategic planning. These are often long-range decisions and affect the overall way of doing business, e.g. implementation of Internet as a new sales channel.

As competitors start adopting Internet in their businesses, it becomes even more apparent and makes the decision on how to use it more urgent. A survey with 525 CEOs of some of the world’s leading organizations showed that they strongly felt Internet is transforming the way all organizations do business. They also said that the pace of business is fundamentally accelerating. (Booz-Allen & Hamilton, 1999)

Decisions in general are difficult to make, due to the uncertainty they involve (Brown & Eisenhardt, 1998). In the case of investing in Internet capabilities for the organization, the historical data that experiences can be drawn from are limited, this compared to a situation with investing in e.g. a welding robot for the production line. This makes this particular decision even more uncertain and hence difficult. Two questions are then: What should an organization base its decisions on in the Internet case? Does the new societal stage influence the way of thinking? There are not many decisions business managers face that both have such a major strategical impact and in the same time such a significant urgency. This peculiarity of the specific decision “implement Internet as a sales channel” makes it an extreme case and interesting to examine. Most of the cases discussed in literature on decision making in a business environment have a more moderate level of either strategical impact or urgency.
1.2.2 Relationships in the distribution channels
When producers are in the presence of deciding to implement Internet as a new sales channel, it is important to pay attention to, how this will affect the distributors. If they either lose their market share and position, or experience a decrease in profit and profitably, because they are bypassed, it will in most cases arise a conflict. (Clemons, 1999) This conflict results in increased tension and variables such as trust and commitment need to be considered (Rayport & Sviokla, 1994). Do the distributors continue to patiently support the producer’s distribution even if they are by-passed as Internet is introduced as a sales channel that might “steal” their customers? How important is the power structure in an industry? If the producers have the power, can they decide the rules in the industry? How should the change be handled by producers, not to loose the revenue creating relationship with the middlemen? Since there will coexist parallel channels, managers need to consider how they are about to handle the different relationships in the different channels, those with the distributors as well as to the end user.

The distributors will probably have to change their strategies and consolidate their position to keep their customers, otherwise could the implementation of Internet by the producers have devastating effects on them. (Vossum, 1996) The distributors strength are that they have a personal relation with most of their customers already (flyers/buyers), which the producers do not (only flyer). They may also have a strong trademark that cannot be overlooked by the producers. The questions are then: What role the distributors should have in the future in order not to loose sales or at worst be put out of business? Is cannibalization a danger? The different channels are appealing to different customers depending on the type of product and its planned usage. So, what are the alternative strategies available to the actors in the distribution channel?

1.2.3 Value Added
A general apprehension is that products sold over the Internet are applicable to a low cost strategy. This might be since most of the products sold over Internet have been standardized and easy to compare (Ernst and Young, 1998). Is it then true that Internet is limited to only sell commodity type products? The traditional distribution channel should then, according to the general apprehension, apply to a differentiation strategy and provide other values, e.g. collection, collation, and experiences. Is this a correct way to see it? Moreover,
what are the new and different values the customers appreciate when buying on the Internet? Does the value delivered differ just by the virtue of the fact that the traditional sales channel and the Internet channel are different? Earlier research has suggested models for describing the value the Internet channel can provide. These models are somewhat disperse, and the question is how do they interrelate? When evaluating the implementation of Internet managers need to consider how much added value there is with Internet communication and transactions compared to existing alternatives. There are differences in value-added depending on e.g. the products/services, type of organization and market. (Quelch & Klein, 1996)

1.2.4 Financials

To make an investment decision, a traditional approach is to conduct a cost-benefit analysis: E.g. what are the effects on costs and revenues the next five years? Organizations have been making IT investments for several decades, however these have been of a more compartmentalized type. They have had a limited reach and only affected limited numbers departments in the organization (Sandén, 1998). Internet on the other hand has a more extensive reach within the organization and the linkages externally. EDI has been used to integrate organizations together in the supply and distribution chain, but those solutions were reserved for the larger organizations with on-going relationship (Hendry, 1993; Fredholm, 1997). Organizations invested in EDI earlier since it reduced transaction costs, transcription errors, and inventory costs etc. (Laudon & Laudon, 1995) Electronic commerce over the Internet, on the other hand, is more easily accessible for all organizations and individuals, in addition it does not require any proprietary technical systems. To study an investment in Internet capabilities is interesting, since it is different in many ways from other previous IT investments, e.g. it has a more extensive reach internally and externally. It is reasonable to believe that this means that more factors needs to be taken in consideration in the evaluation of the investment, such as alternative costs. This report contributes by bringing forward some of the issues involved in an Internet investment that are not present in other IT investments.

According to Benjamin & Wigand (1995), the future of electronic markets will affect the transaction costs (coordination costs) in each segment of an industry value chain. Markets and hierarchies are two mechanisms for coordinating the

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4 “Electronic Data Interchange – The direct computer-to-computer exchange between two organizations of standard business transactions.” (Laudon & Laudon, 1995)
flow of services, materials and information through a value chain. The choice of mechanism will depend on which transaction that coordinate the information best and most efficient. Networking technologies can greatly reduce the cost entailed in exchange transactions and the network and in many instances, will serve as the market. Internet has and will continue to lower the overall coordination transaction costs as well as restructuring and redistribute profits among the actors. As information technology continues its rapid cost performance improvement, the unit cost of coordination transactions will approach zero and the electronic markets will be in favor (Kelly, 1998). Is it true that the transaction cost will be less if organizations sell their products over the Internet compared with the traditional distribution channel? Will the revenues be shifted from other sales channels or will new revenues add to the profits? Are there other considerations beside of the directly quantifiable revenues and costs that has to be taken into account in the Internet investment decision?

1.2.5 Summary of the Problem Discussion

- What is important in a decision situation regarding if and how electronic commerce should be deployed in an organization’s business?
- How shall the producers nourish their relationship with the distributors as they bypass them?
- Is there a difference in the possibility to add value to the customers in the two alternative sales channels?
- Is there really an opportunity to use Internet as a new sales channel and bypass the distributors? Can this be done profitably?

1.3 Main objective

We have defined the Master’s Thesis main objective as follows:

To study and get a better understanding of the use of Internet as a new sales channel when there already exist a sales channel including middlemen. A description is made covering the decision situation and three areas that are affecting the decision – relationships to the middlemen, added value in the channels, and financials.

1.4 Demarcations

We have chosen to study European airlines as represented in Sweden and airlines in the US. The reason why the European airlines are only studied in Sweden is that it constitutes a minor interest in the study. Although a comparison between the US and Europe is conducted, the main goal is to give
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guidance to other industries from the US airlines’ experiences. In general, Europe is substantially behind the US in adopting electronic commerce, even though it now grows at a faster rate (Taylor, 1999b). Thus, less emphasis is put on the research in Europe. The airlines chosen are required to have a traditional distribution channel as well as an Internet on-line sales channel to be eligible as study objects. To be able to make analogical comparisons with other industries it is a necessary requirement. Even if security, logistics, and general penetration undoubtedly have a major impact on what we are studying, we only briefly discuss these issues in the thesis. To incorporate these in the research would make it too bulky. Travel agents were only interviewed in Sweden since we considered it enough for its explorative purpose. Neither are the end customers interviewed or studied closely. Some secondary sources regarding them are however used. The time constraint is again the reason for the exclusion.

1.5 Target Audience

This Master Thesis is conducted at the program of Business and Administration at Linköping University in Sweden, and one part of the target audience is people connected to the university. Our research is a study within a larger project, the “Service Innovation” project at MTC (Marketing Technology Center). The companies and members of this larger project are the key audience. They are assumed to have some preunderstanding of Internet sales, therefore basic terms and concepts used in the report are not explained. We have chosen to write the report in English since we believe that Internet is global and it will also be of interest to international practitioners and academic scholars.

1.6 Report Layout

In order to provide the reader with an overview of the report a brief layout of the themes and chapters are presented. As discussed above, the thesis will cover some of the problems occurring when the producers, in this report represented by the airlines, are introducing Internet as a new sales channel and thus bypassing the middlemen, e.g. the travel agents, see figure 1.

The report has the decision situation as a starting point. The text is organized around four themes, see figure 2. The first theme and the starting point is the:

5 “Service Innovation” is an MTC marketing research and development program operating in close co-operation with leading Swedish corporations. Http://www.mtcab.se
Decision situation by itself, induced by changes in the environment and industry requiring a decision process about the distribution channels. We have chosen to include three elements in the decision process that have major impact on the decision made, each of these represent themes in the report.

**Figure 1:** A simplified model of (i) the traditional distribution channel and (ii) the new Internet distribution channel. (Own developed).

*Relationships*, the second theme, to the middlemen in the traditional distribution channel as well as to the flyer/buyer, are affected by the introduction of Internet as a new sales channel. There are different aspects influencing the extent of the effects on the relationships. As a producer, these should be kept in mind.

The third theme discusses the possibility to *add value* in the two different channels. A foundation to this discussion is the purchasing processes of the buyer.

Our fourth theme is the financial perspective on the *IT investment*. This is a traditional investment analysis with revenues, costs, and break-even in addition some IT specific consideration introduced.
### 1.2 Problem Description

<table>
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<tr>
<th>Decision Situation</th>
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### 1.3 Main Objective

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### 3. Travel Industry

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### 2. Method

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### 4. Frame of Reference

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- Change
- Decision Process
- Distribution Channels

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<td>Channel Leader</td>
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<td>Purchasing Process</td>
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<td>Channel Format</td>
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<td>High/Low Involvement</td>
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<td>Adoption of Innovations</td>
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<td>Revenues</td>
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<td>Breakeven</td>
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### 5. Empirical Findings

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### 6. Analysis

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### 7. Results

Figure 2: A report layout showing the different themes and how they relate to the chapters. The decision situation spans over the other three themes.
2 The Travel Industry

This chapter will provide the reader with a historical perspective as well as a general description of the travel industry with the airlines in focus. Further, the potential impacts and implications Internet has on the traditional distribution channel will be discussed.

The travel distribution’s history goes back to 1950s and 1960s when travel agents sold incremental leisure trips, a business that required a lot of coaching and advising. In 1980s and 1990s, airlines noticed they were paying commission to travel agents for serving both incremental travelers and business travelers. From the beginning, it was a cheap distribution channel. Later it became expensive as the travel agents began to serve the corporate travelers as well. Corporate travel is associated with less coaching and advising, a profitable business for the travel agents. There is a large difference between profitable customers, which are easy to serve and pay high ticket prices, with less profitable leisure customers, who need more advising and pay lower fares. (Clemons, 1999)

As the travel industry is facing a future with drastic changes associated with many strategic uncertainties. There is a growth in global competition and intensity due to deregulation, an emergence of information technology, and changing customer demands. The opportunities are complex and varied for all the actors in the traditional distribution channel and therefore it is difficult to determine the strategies that will add value to the different actors’ offerings. (Andersen Consulting, 1998) This results in a revolution where today’s customers are offered discounted tickets, budget packages, frequent flyer programs and overall cheaper available tickets. The key driver to change, the deregulation, has led to an increased competition with many new entrants offering low cost, budget travel. Cheaper travel means pressure on the margins, which makes the need to cut costs even more apparent. The airlines’ response is the implementation of Internet and on-line sales, which can result in disintermediation. (Price, 1999).

2.1 Description of the Travel Industry

To understand the key drivers and changes the travel industry are facing, it is important to have a picture of the traditional distribution channel as it looks today, see figure 3. We have used this description, one of many, since it gives a clear picture of the actors in the travel industry.
The traditional distribution channel links the producers to the end customers in a linear shape. The aggregators are the CRS (Computerized Reservation Systems) and the GDSs (Global Distribution Systems). They communicate inquiries and booking requests between the producers and the travel agents. They act as the link between producers and the end customer but they are predominantly unknown by the customers as they have a separate role from the airlines and the travel agents. (Andersen Consulting, 1998).

The tour operators can be seen as wholesalers. They buy from different producers and combine products together to packaged holidays. These are sold directly to the public or through travel agents. (Andersen Consulting, 1998).

The retailers, travel agents, have traditionally been the dominant sales channel for the producers and the tour operators. They provide a vital link in the distribution chain, today four out of five airline tickets are issued by travel agents (Andersen Consulting, 1998), see figure 4. The direct channel consists of the airlines’ own ticket offices and reservation centers. Internet is now added to the direct channel.

**Figure 3: The traditional distribution channel in the travel industry.**
(Development of Andersen Consulting, 1998)
By bypassing the travel agents, the airlines lower their costs, since every time a travel agent book a flight through a GDS the airline has to pay a fee of approximately $3 (Forbes, 1998). Different sources give varying answers on the level of this fee. It depends on which GDS the booking is going through and what level of service the airlines want. The airlines also have to pay the travel agent an average 8% commission on the total price of each ticket sold. Including these two fees, the distribution through the indirect traditional channel cost an airline approximately 17-20 percent of the ticket price. Also included is bonus, credit card fees, and the airline’s own costs, such as its sales force. The distribution through the airline’s own direct channels (ticket offices and reservation centers) are cheaper, it cost about 10-15 percent of the ticket price. Through the direct channels the airline save the travel agent commission, hence the difference between the two stated percentages. (Bouvard & Somosi, 1997) Tickets sold through the Internet allow airlines to save the commission, internal handling costs, and sometimes to eliminate the GDS fee completely or lower it substantially. Our conclusion is that it is reasonable to believe that the distribution cost using the Internet sales channel should be less than 10% of the ticket price.

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<tr>
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<th>Internal Channels</th>
<th>External Channels</th>
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<tr>
<td>France</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>UK</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>Germany</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>US</td>
<td>20%</td>
<td>80%</td>
</tr>
</tbody>
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Figure 4: Internal channels (direct channels) and external channels (indirect channels). Percent of total sales: Bouvard & Somosi (1997)
2.1.2 Key Drivers

“The Swedish travel agents are facing an evolution. A straight channel between the producers and end customers is a threat to the travel agents, a threat they must meet with larger service offerings.” (Travel Management 1987, p17)

The above statement shows the travel agents’ fear to be bypassed. During this period, 12 years ago, they faced a new technology that made it possible for the customers to book their trips by themselves, either through a PC or a video text terminal. It was used by the travel agents’ customers who could search and book flights, hotels, and cars etc directly in the travel agents booking system. The fear was that the producers would develop the same and “steal” their customers. The response was to offer their customers more offerings, such as travel management. (Travel Management, 1987) Today, Internet has almost the same effect on the travel industry as the videotext terminal had 12 years ago. Internet has though a much larger impact since there are not any requirements for proprietary software or hardware and the Internet technology is more adopted. Today (Dagens Nyheter, 1999), there are 15 million European households that have access to Internet, the number is estimated to be 50 million year 2003.

There are many factors in the travel industry that are reshaping the way travel products and services are distributed according to Andersen Consulting (1998). The key changes obvious and predicted in this transformation are: deregulation, increased competition, technology, and changing customer demands.

The airlines all over the world have grown in an environment of restricted competition, but in 1978 the U.S. airline industry was deregulated. (Sarathy & Ramamurti, 1997) In Europe, the deregulation became real as late as in 1992. Before the deregulation, the local airline often had a market share of 60 % and there was little incentive for them to improve their internal channels or manage the relationships with the external distributors more efficiently. They charged customers high ticket tariffs and had minimal marketing. But, since the deregulation the airlines have lost some of their comfortable, protected world. (Bouvard & Somosi, 1997) The deregulation means that an airline is permitted to fly domestic routes in any other country and full access to all international routes. This resulted in increased competition and concentration of airlines. This growing international competition pressures airlines to reduce costs and become more efficient to optimize market share. (Sarathy & Ramamurti, 1997) In a fully deregulated environment (not existing today in Europe) the travel agents will
have a greater bargaining power and the airline’s success will depend on mastering sales, marketing and distribution. (Bouvard & Somosi, 1997)

*Information technology* is revolutionizing the way organizations do business. Over the past few years, much of the excitement has been focused on Internet and the World Wide Web. This is also true for the travel industry, an industry well ahead in adopting Internet as a new sales channel. (Andersen Consulting, 1998) The new technology is also capable of distributing tickets more efficiently, with electronic ticketing (Bouvard & Somosi, 1997).

The changing *customer demands* are an important factor for the success of Internet. As Internet become more and more known, the uncertainty to use it is less. The future of Internet depends much on the choice of the end-use, if he/she is comfortable with technology, the use of Internet will certainly increase. But, there are still customers who wants an expert to book her/his trips, the travel agent is in favor. (Ford et. al, 1998)

These factors, among others, will decide the future of the traditional distribution channel in the industry. Depending on how fast the above changes occur, the different actors need to determine how proactive they need to be. When customers obtain direct benefits using Internet compared to the traditional distribution channel, it will speed up the transformation. The benefits might include lower price, more convenient hours, and better service. (Vassos, 1996)

### 2.1.3 An Information Intense Industry

The travel industry is characterized as mature due to slow growth. Other aspects add to the picture: The passengers are selecting airlines largely on a price basis, the airlines do not have technological advantages over their competitors, it is a non-transferable industry, and cost efficiency is the primary strategic goal. (Das & Reisel, 1997). In contrast, Porter (1998) argues that there are no industries that should be labeled mature:

"*There are no longer mature industries; rather, there are mature ways of doing business.*” (Porter, 1998, p 84).

Instead of mature industries, one should talk about mature ways to conducting business. Today, it means using information technology such as Internet to re-energize the business. Industries that are information intense have more

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6 No paper ticket is needed.
potential benefits in using information technology. Evaluating the level of information intensity can be done from two aspects, the value chain and the product. The value chain is the individual organization’s activities that together form the operations (Porter, 1985). Each of the activities taking place in the stages of the value chain has both a physical and a information-processing component. Likewise, the product itself also contains a physical and an information component. With a larger amount of information in these two dimensions, the value chain and the product, the industry is labeled ”information intense”. There is a trend towards increasing use of information technology and it is changing the way business is conducted for mature industries as well as newer more evolving ones. (Porter, 1998).

The airline industry is information intense for a number of underlying reasons, see figure 5. First, when a plane leaves any free capacity in the form of unsold seats it is lost forever. To maximize usage, heavy information handling is needed such as multiple price range quotes, different terms for tickets, diverse distribution system etc. Second, to make a plane fly many things must come together timely; crews, plane maintenance, weather forecasts, slot times, luggage and cargo, passenger transfers, specially requested food etc. Third, the airline industry is a service industry and to keep up with competition relationships with customers must be kept friction free. A way of doing this is knowing the customer better, e.g. through frequent flyer programs. The relationships are also extended by the introduction of Internet as a new sales channel. Information technology is of obvious importance due to the industry being information intense. An example how information technology can make a difference in the value chain of an airline is the decision support system used for scheduling its pilots that enabled American Airlines to save $50 million per year. The use of information technology is clear remembering the many functions that it takes to make a plane fly and sell a seat together with the fact that a company like American Airlines makes about 2200 flights a day. (Forbes, 1997).
A second consequence for the airlines due to the information intensity is that it is possible to deploy network economics in many areas of its business. The ideas of network economics already have relevance to the airline industry in two aspects. First, both the traditional distribution channel and the Internet are networks using computer technology. In this study, these theories will mostly be applied to the Internet channel. Second, the routes that airlines traffic are networks.

### 2.1.4 Alliances

Due to the deregulation and thereby increased competition, there has been a growth in the number of alliances in the airline industry. These co-operative agreements involve airlines sharing routes, jointly setting fare and schedules, integrating marketing and incentive programs including reciprocal frequent flyer programs and combining aircraft maintenance, catering, reservation and a host of other operational matters. (Andersen Consulting, 1998) This is supported by Hellgren & Melin (1991), organizations need to find new ways to endeavor a competitive position when the industry reaches the mature stage. Alliances is a way to protect and reach a dominant position, organizations need to find new arrangements, e.g. strategic alliances. Gummesson (1995) argue that effective alliances have the opportunity to reach ”economies of scale” and ”economies of scope”, while the single partner does not have to grow and can still be flexible.
If organizations see the changes as opportunities, they will outperform their last performance through co-operation and competition (co-opetition). Hellgren & Melin (1991) agree with above, different kind of strategic patterns have emerged due to high global competition. New collaborative arrangements, horizontal and vertical, are developed to achieve a dominant position or to find a way to isolate oneself from cost leadership competition. To handle the pressure of increased efficiency and flexibility, organizations seek others to overcome their weaknesses and combine their strengths.

There is also a tendency for other providers to join the alliances, e.g. hotels and car rental companies. This gives the advantage of new customer segments that may fill empty chairs, hotel rooms etc (Travel News, February 1999). The customers benefit financially as well as allowing them to a one-stop shop for global travel.

### 2.2 Airline Economics

As the airline industry is hyper-competitive, the airlines need to offer a high service level at the same time they need to lower their costs. One way this is done is by creating partnerships with other airlines, alliances as mentioned above. A second way is streamlining the operations with the maintenance, crew management etc. A third way is using differentiated pricing, service and other terms to maximize the number of passengers on each flight and what they pay. (ATA, 1999)

#### 2.2.1 Revenues and Costs

Passengers accounted for 73% of the major airlines’ revenues in the USA in 1997 (freight and cargo 10%, charter 3%, mail 1%, and other 13%). Less than 10% of the tickets sold are full fares; these are mostly last minute business travelers. The 80:20 rule applies in the industry; 8% of the total numbers of passengers make 45% of the trips. (ATA, 1999) This is one reason for the importance of the frequent flyer programs. The average frequent flyer in the US though belongs to 4.9 programs. The number is lower in Europe, more due to the geographical spread of the programs than a lack of interest. (Upton, 1999)

According to Bouvard & Somosi (1997), the ticket distribution is often the airline’s third largest cost after personnel and fuel. This is consistent with the

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7 Hyper-competitive refers to competitiveness more intense than usually is called highly competitive.
ATA (1999) statistics: The share of the costs in 1997 for the promotions/sales was 14%, including travel agent commission. (Flying operations 29%, aircraft and traffic service 16%, maintenance 12%, transport related 10%, passenger service 9%, administrative 5%, and depreciation/amortization 5%). As much as about 10% of total costs are commissions to travel agents. This means that there is much to save from cutting the tickets sales costs.

2.2.2 Key Measurements
One way of calculating break-even for an airline is by using the load-factor, passenger seats filled compared with capacity. Because of high competitiveness, the airlines operate very close to the break-even. This implies that sale of a few additional seats can turn a loss flight into a profit one. A net profit of 1-2% is normal in the industry compared with 5% for the US average. A second widely used measurement in the industry is the yield, revenues per miles flown. Due to the competition, there is a clear trend for the yield to get lower seen over a longer time span. (ATA, 1999). Airlines flew more than 205 million empty seats in 1997, although it was the most profitable in industry history (Priceline, 1998).

While the yield is constantly lowering, the net profit is already minimal. This means that either the load-factor has to increase or the costs must be lowered in order to increase the profitability.

2.3 The Travel Industry’s Customers
In the travel industry the customers can be divided in two parts, corporate and leisure. Corporate travel is divided in two parts, easy self-booking through Internet and more complex journeys booked through highly qualified travel consultants. Leisure travel is divided as well, easy bookings and packaged bookings through Internet and more complex bookings through a travel agent, see figure 6. (Andersen Consulting, 1998)
Figure 6: The importance of emerging channels, in different market segment. Source: Andersen Consulting, 1998.

Many customers in the US are using self-booking technology, which give them an access to travel reservation systems from their own computer. They can choose flights, check prices, book hotels and use additional features such as maps and destination information. In the US, it is mostly simple trips “point to point” whereas Europe travel is more complex. There are different opinions regarding the benefits of self-booking where many managers are worried it will be just another task added to already busy days. Others have experienced saved travel costs, Charles Schwab, an US analyst group, saved $1.6 from its annual travel bill as well as saved staff salary. Other benefits shown are earlier travel decisions and gaining cheaper flight deals. Travelocity, one of the largest Internet travel sites, have 30% bookings from corporate customers. Since more trips that are complex are conducted in Europe than in the US, this has resulted in a barrier for European executives to adopt self-booking technology. Further, there are many arguing that highly paid managers do not want to be their own travel managers. (Jolley, 1998)

2.4 Summary

The airline industry is characterized by:
- Low differentiated commodity product with high service content.
- Low margins, 1-2% net profits versus 5% for the average industry in the US.
- High information intensity, both in the value chain and content of the product.
- High capital intensity.
- High competitiveness among incumbent companies.
3 Method

This chapter begins with a description of the scientific approach with the aim to enable the reader to judge whether our research is conducted in a scientific way. Further, we describe the foundational concepts and techniques that have constituted the work with this report. In the end of the chapter possible sources of errors is discussed.

3.1 Scientific Theory and Methodology

“If yesterday’s truths are today’s untruths, the truths of today might well be untruths tomorrow.” (Thurén, 1991, p 11)

In the days of yore, it was seen as true that the earth was flat. Later scientific advances have shown that it is of a near spherical form. The new “truth” has made yesterday’s “truth” to become untrue. Scientific theory takes an overall approach to how knowledge is created in the society. Two issues need to be addressed that are fundamental to scientific theory. First, how should the terms “knowledge” and “truth” be defined? Second, one must determine how to judge if statements and research findings etc are knowledge and truth from a scientific standpoint. Methodology is linked to and builds on the scientific theory. It gives guidance to how the actual research work is conducted on a more operational level. Models and procedures for sampling of research objects, data collection, and analysis are covered. The following sections discuss paradigm, method approach and working paradigm with its choice of research objects, see figure 7.

![Diagram](image-url)  

**Figure 7: Research and chapter layout (Arbnor & Bjerke, 1994).**
3.2 Fundamental Conceptions

Each individual during his/her life develops fundamental concepts. These conceptions are difficult to alter, at least in the short term, and affect everything the person does, e.g. research, perception of problems, and its solving. In addition, they affect the paradigm the individual belongs to, which in turn affects the method approach. In that sense, the paradigm works as an interface between the fundamental conceptions and the method approach.

Our fundamental conceptions, like any other conceptions, are hard to pin point. However, due to socialization, our conceptions are influenced by our upbringing in Sweden and schooling, which is now ending with a Master of Science Degree in Business and Administration at Linköping University. Our awareness of these conceptions is not that well developed since we are new and inexperienced researchers. Therefore, we find it hard to describe them more thoroughly. But, by describing our methodology we hope to establish credibility in our research.

3.3 Paradigm

Kuhn has described the scientific process as a revolution between schools of approaches. He claims that there is a framework of norms and ideals that rule in research. Initially there is a “normal situation” in which scientists are in consensus of the basic overall presumptions. The continuous research develops the “school” more and more with added knowledge. After a while, situations occur that cannot be explained with the basic overall presumptions in use, so called anomalies are located. To be able to handle these anomalies several paradigms coexist under a crisis period. Later when a revolutionary breakthrough is achieved, with a new paradigm that can handle those earlier anomalies it becomes the winning paradigm. A new normal period is established. (Andersen, 1994). Two general paradigms are positivism and hermeneutics, these are widely accepted among researchers.

3.3.1 Positivism

Positivism is nearly connected to natural science where measurability, validation and quantitative methods are meant to give a general representation of reality. A simplification is striven for to find the general in the specific. In order to reach the knowledge goal it is necessary to look away from the plentitude of the reality. This is done with abstractions in the shape of logical models, representative cases, and pure cause-result causalities. This approach can be
compared with the map that resembles the terrain of reality in a simplified form. The positivistic scientist makes a strict demarcation between facts and values. The mission for science is to bring out facts, as they are, and not values how something should be. Emotions are seen as subjective, private, and thoughtless – and should not affect research. Reason should be objective, all ruling, and factual. The perhaps most important criteria on scientific adequacy for a positivist. To make it possible for other scientist to come to the same conclusion mutual rules for research and model descriptions are important. The formation to these rules are important too, e.g. to ensure that the research objects gets representatively sampled. In addition to the requirement that “knowledge” should correspond to what is it should also correspond to what will be, i.e. the future. This means a demand for a capability to make a valid prediction. (Andersson, 1979).

3.3.2 Hermeneutics

Where the positivists try to simplify reality with a representation, the hermeneutists rather go the other direction and try to penetrate the abstract reality and make it more concrete. They problematize it in order to understand; an understanding of the parts gives an understanding of the whole. They use terms as “meaning” and “intentions” in their scientifically statements. The hermeneutists claim that social science cannot be treated in the same way as natural science. The social life is given a relativistic perspective, i.e. every time epoch and society should be understood from terms as “time spirit” and “people spirit”. In that way, the situation is entered into and the period in time studied. Since the “truths” of natural science also are a result of culture they are seen as relative, hence, the hermeneutics do not have the universal validity as a goal. Descriptions of methods are rare in the research by the hermeneutist because the belief that biases is present in all levels of the research. In the case that these rules would exist it would turn the interpretive action into positivism. (Andersson, 1979).

3.3.3 Our Paradigm

We believe with the fast changes now occurring due to the society’s shift to the information age make it less useful to establish general laws like the positivists prefer. The risk of formulating a law that becomes one of tomorrows “untruths” is too big. Lovendahl and Revang (1998) support this view and argue that:
“...rather than looking for causal relationships and models that may help us explain ex post and predict ex ante, postmodern researchers and managers may look for pragmatic concepts that help focus action and attention.” (Lovendahl & Revang, 1998, p 769).

Therefore, we will put more emphasis on descriptions and bringing important issues to the surface. I.e. we do not consider ourselves to be positivists. Neither do we join the ranks of the hermeneutists. Our interpretations of the interviewed respondents are to a great extent limited to interpret “what is said”. Since we cannot enter the situation the different actors/respondents in the industry are in, we are not able to get enough understanding of it to make the deeper interpretation that the hermeneutics require. We are unable to answer questions like: “Why is the respondents making this statement – because of family reasons or is he/she leaving the organization?” Instead, we are forced to accept the statement as free from such influences and not consider those. In some cases, we do however have the understanding to be able to say that the respondent had an intention to communicate something else than actually articulated. However, generally we have to rely on what is said semantically, and that it is a good representation of truth. This leaves us somewhere between the pure positivists and hermeneutists.

3.3.4 Conception of Reality

Instead of the black and white description above, a scale from objectivism to subjectivism, in large corresponding to positivism and hermeneutics, consisting of six steps can better describe the individual scientist’s idea on reality, see figure 8, next page.
Of the six views on reality above, in figure 8, the third and forth ones most closely resembles our own views as researchers. We are not seeking for causal relationships rather we believe that all information is context dependent. Relations are probabilistic and relative rather than fixed and factual. Information flows make organizations and environment change together. This means that research results are relative and specific for the immediate context where they were developed. Never the less they can be similar in other industries and contexts. (Arbnor & Bjerke, 1994)

3.4 Method approach

The researchers view of reality is linked to the practical working paradigm by using a method approach. In studying business and organizations there are three different approaches that could be used: Analytical, Systematic and Actor approach. (Arbnor & Bjerke, 1994)

3.4.1 Analytical Approach

This approach see reality as objective, the knowledge that is created by research is independent of the individual. The question is though how we can reach an objective reality without an affection of our own subjective experiences. The answer according to this approach is that reality is explained through causal connections, where efforts are made to find out which factor caused a specific outcome. Formal judgements guide the researcher to reach an objective reality.
This approach also assumes that the different parts of reality constitute the sum. (Arbnor & Bjerke, 1994)

### 3.4.2 System Approach

According to the system approach, reality is also objective, at least accessible. Specific with this approach is that forces affect the system as a hole; the sum of the parts of the system may differ from the value of the parts. Interdependencies and links between them create synergies that might add or subtract value. Because of this, the relations between the parts of the system are of great importance. These relations are different from the more bounded cause-effect causality, which is related to the analytical approach. A research according to the system approach means keeping the whole, to explain (sometimes understand) the parts relations to this whole, and the wholes relation to its environment. (Arbnor & Bjerke, 1994)

### 3.4.3 Actor’s Approach

This approach differed from the other two approaches in the sense that it sees reality as socially constructed, and that the knowledge developed is dependent on the individual. Therefore, reality can only be understood from the picture the individual has of reality. This approach has no interest to explain the reality, an understanding is to favor, which occurs through the individual actor. (Arbnor & Bjerke, 1994)

### 3.4.4 Our choice of method approach

The method approach we have chosen is mainly the systems view since it supports the paradigms and view of reality of ours and also because it by itself matches our approach. It is not possible to generalize results, but analogies can be made e.g. in other industries than the one the research objects belong to. The focus in studies with this approach is the forces that affect the system as a whole. The sum of the parts of the system may differ from the value of the parts \((2+2+2=7)\). Because of this, the relations between the parts of the system are of great importance. The systems view is open for the possibility of both mulifinality and ekvifinality. I.e. alternative and mutually excluding effects of an indicator (driving force) as well as alternative and mutually excluding indicators causing a single effect. A systems analysis always renders a system-synthesis. The theory of reality gets better through a better explanation/
understanding of acting in the systems classes. Also, the division of classes changes and improve. See figure 9.

![Figure 9: Boarder of the system studied. The elements in the system will get different levels of attention. (Own development).](image)

### 3.5 Working paradigm

The working paradigm can consist of several steps as shown in figure 10.

![Figure 10: The different parts of our working paradigm (Arbnor & Bjerke, 1994).](image)

The methodological procedure our research follows, is influenced by the systems approach we have taken. The systems approach sees society as a complex system of different actors each influencing each other. Since it is difficult to have a complete understanding of the system studied, the methodological procedure might have to be adjusted as a deeper understanding is achieved during the process. In our case, the procedure first chosen has not changed significantly.

The method is also influenced by our systems approach. Proponents of the systems approach favor a development of the problem formulation during the research process since a better understanding of the system is gained. We changed the problem formulation somewhat as we gained a better pre-understanding. Initially we had the intention to study the cannibalizing of the distribution chain only, with the purpose of contributing to the decision situation. Instead, we chose to use a broader formulation of the problem and also
study other concerns the producers have when making the decision to implement Internet as a sales channel. The study came to cover the decision itself, relationships, added value in the channels, and a financial perspective. We found that the interrelationship between these areas were important to understand in order to comprehend the situation as a whole. See figure 11.

![Figure 11: Development of problem studied during the research process from being limited to cannibalization (i), to also include other factors important in the decision making situation and the decision situation itself (ii). (Own development).](image)

### 3.5.1 Create a Pre-Understanding

The working paradigm covers several activities performed during the research process. The first is creating a pre-understanding, see figure 10. We already had some pre-understanding that was industry specific, either from working in it or previous studies on it. Our theoretical background includes studies in e-commerce, marketing, and business strategy.

An explorative approach was used to develop the pre-understanding further. This to get an even better insight to the industry and problem area. We interviewed one airline representative, several travel agent representatives, and one GDS\(^8\) representative. Some literature studies were done in addition to this.

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\(^8\)The distinction between the terms “CRS” and “GDS” are not always clear when they are used in the industry. In this report the term “CRS” is used for the individual airline’s own internal reservation system where as the “GDS” is the external reservation system operated by a separate company containing data from several airlines etc. The larger GDSs are Amadeus, Galileo, Sabre, and Worldspan.
3.5.2 Method for Collection of Data

The research design used to gather information on the problems studied was a qualitative multicase like study. Face-to-face interviews were most commonly used with the addition of telephone interviews. These constitute the primary sources. Secondary data sources have also been used, these include annual reports from airlines, consulting firms’ reports, industry organizations’ reports, articles, books.

Descriptive research was done to some extent, it was most present in the investment theme of the research. The relationship and delivered value themes of the research can be classified to be more explanatory research and a model is developed. The model set up the framework to describe some alternative strategies of future development. The intention is not to do predictions but to suggest possibilities.

3.5.3 Sampling

Many aspects affect the outcome of the revenues in respective channel for each airline. To name a few: promotional expenditures, brand strengths, high/low involvement product, high/low and active/passive price, frequency and size of purchases, the present channel’s accessibility and efficiency, existing relations to customers and their characteristics. In order to achieve a situation with as many exogenous variables constant between research objects as possible one industry is studied (the travel industry). Research has shown the existence of an “industry-way-of-thinking” where agents (decision-makers) within the same industry have adopted a similar approach to ”the rules of the game” (Hellgren & Melin, 1993). This supports the idea that the exogenous variables are varying less within an industry than between different industries.

The airline industry was chosen because of several reasons. Industries that are information intense, such as the airline industry (see 2.1.3), have more advantages from an implementation of electronic commerce and will be more prone to advance with the technology. This will lead to a wider usage over different functions. Airlines were also early to adopt the Internet in their business, in January 1995 British Midland launched a sales and online payment site (IBM, 1999). Therefore, a study over a longer time span is possible. The travel industry has been active and aggressive in deploying electronic commerce applications and has taken the lead in many ways. Travel is one of the largest industries for electronic commerce on the Internet and is widely regarded as one of the services most conducive to sell via Internet. (Andersen Consulting, 1998)
In 1998, airline tickets were one of the most sold items on the Internet. Travel counted for $654 million of the Internet sales in 1997 and is projected to reach $7.4 billion in 2001, according to Forrester Research’s estimates. Datamonitor predicts that the travel industry will account for 35% of the online sales in 2002, up from 11% in 1998. (Hof et. al, 1998) A big barrier for a larger adoption to Internet in Europe is the high surfing fees. In the US, it is free of charge to surf on the Internet, whereas in Europe you have to pay a fee for the local call. (Dagens Nyheter, 1999)

The research aim to study the traditional sales channels’ versus the Internet channels’ benefits where there is a clear distinction between the different parties in the channel. In the case of the airline industry, the intermediaries are all separate legal entities with their own separate interests. Some ownership links do exist e.g. the Sabre GDS and American Airlines, but these are not expected to affect the independence to any greater extent due to the competitive laws in the US, EU and else where.

To further isolate the endogenous variables – revenues in each channel etc – the concept of strategic groups was used. The airline industry was described by allocating the research objects – the airlines – to strategic groups with service level, route network, and revenues as strategic variables. These were formulated after our explorative interviews with travel industry representatives. The variables are also matching those suggested by Veliyath and Ferris (1997) as suitable for strategic grouping of airlines; differentiation, scope, and size. They in turn are supported by more than a handful of other researchers mentioned in their article as useful variables in general like e.g. Lawless et al (1989) and Porter (1980). In addition, others verify the relevance of these variables to the airline industry (Thomas & Ramaswamy, 1993; Sarathy & Ramamurti, 1997). Since the strategic variables we have chosen both have support from practitioners as well as previous research, our judgement is that they are appropriate. There are mobility barriers between the groups that hinder a company to easily shift group belonging. This makes it possible for a low cost actor to exist within a strategic group in addition to the overall low cost position. The strategic variables defining the groups are preferably those that determine the key mobility barriers. (Porter, 1980). Service level (differentiation), route network (scope), and revenues (size) are not possible to change instantaneously, i.e. this condition is also fulfilled. Organizations in the same strategic group share many aspects of strategy and they are expected to behave similarly in the same situation (Porter, 1980), making the possibilities to generalize among them higher. The airlines sampled and used as study objects in our research have a
high service level, a large and international route network (both their own and through the alliances they participate in), and they are among the top ten in revenue size in Europe and the US respectively.

The respondents representing the airlines were selected with judgmental sampling. This sampling was based on the position the respondents held. These are: *Internet manager* (the individual is in charge of the online channel at the airline). *Account Manager* (the individual is in charge of the airline’s relationship with at least one major travel agency company). One type of respondents at the travel agents were also selected using judgmental sampling. Their position was: *Airline Relationship Manager* (the individual is in charge of relationships with airlines). Others within the travel agent companies were sampled using a snowball sampling, those that we got recommended to talk to etc. These respondents are called *Travel Agent Representatives* (they hold different positions in the travel agency; e.g. technology analyst, sales manager or sales representative).

We have conducted six explorative interviews. In Europe, we interviewed six airline respondents, two with travel agents responsible for the relationship with the airlines, and one interview with an Internet consultant. We also conducted five interviews with US airline representatives, two of these were telephone interviews.

### 3.5.4 Design of Interview Guide

A form with questions has been used to assure consistency between interviews. The interview guide was organized around the themes of the study as far as possible. Most questions were formulated in a way that rendered open answers. See appendix 1. The questions from the form reappear as we present the empirical data in chapter five.

### 3.5.5 Interview Process

The major part of the empirical data is primary data collected through interviews. Several people have been interviewed in the same organization to get a broader perspective and to be able to cross verify the statements. Some

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9 Note that the positions are not always the official title held at respective company, instead they are sometimes changed to be more generic. The intention is to be descriptive of the respondents work tasks.
INTRODUCTION - A SALES CHANNEL IN THE AIRLINE INDUSTRY

interviews were made over the telephone, but most at meetings at the workplace of the respondents. In addition, follow up questions was asked. Audio recordings were used to store the information and notes were used as a support during the interviews. The use of recordings were made to free our attention by not having to focus on making notes.

3.5.6 Organizing Interview material

The audiotapes have been typed in order to systemize the material and get a better overview. These transcripts were not of the exact wording of the respondents, instead they were rephrased to be more concise. The interview answers regarding the investments where codified were possible. Each respondent has been asked to read a typed transcript of our interpretations of their statements and comment on any misconceptions in it. The main findings from the interviews were summoned up in chapter 5, “empirical findings”, in this report.

3.5.7 Analysis and Conclusion

The summarized empirical findings in chapter 5 were analyzed using the theories and models in chapter 4, “frame of reference”. Similarities and differences between each respondent as well as between the Swedish and US respondents as a group were brought to attention.

3.6 Method Approach and Research Objects

To illustrate where the emphasis in this study is, the industrial field matrix (Hellgren et al, 1993) is presented below, see figure 12. The dimension not included in the matrix is time. Data have been collected during a short time period in which questions were asked about the past, present and future.

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<thead>
<tr>
<th>Method Approach</th>
<th>Unit of Analysis</th>
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Figure 12: The industrial field matrix approximately illustrating the method approach and its relation to the units of analysis in this study (Development of Hellgren et al, 1993).
3.7 Credibility

An important part in evaluating the credibility of a scientific research is how the empirical data were gathered and treated. The relationship between measured score and the actual/real score is inferred using two approaches, validity and reliability.

3.7.1 Validity

Validity is about making a judgement whether the chosen method for measurement actually measures what was intended to be studied. Also, that the differences in scores among objects correlate with the objects true differences on the specific characteristic. It is difficult to be absolutely sure about if the chosen method is valid. This since it would require another measurement method to benchmark against that is known for sure to be accurate. If such a method did exist it would make more sense to use it instead of the unproven one. Similarly, if the true character was known, and thus enables comparison with the score, the measuring of it would be pointless. Since there is no “safe” way to make the assessment on validity, the discussion on validity is often subjective and judgmental. This judgement can be done using several validity concepts, those that are relevant to our study are presented and discussed below (Lekvall & Wahlbin, 1993; Churchill, 1995):

There are specific kinds of validity to help making the judgement in a more organized way. *Face validity* is the immediately perceived validity. If a number of persons with insight are in consensus about that the questions asked are reasonable, it is fare to say that there is some validity. During our explorative study interview questions were formulated and presented to some industry professionals to see if they were thoughtful enough.

*Content validity* refers to extent that the method is capturing all the important aspects contained in a concept. E.g. a broad concept like “best product” needs to be analyzed using several dimension to reach some adequacy of measurement. A low content validity would mean that the number of dimensions used has been too selective. Our themes are all quite broad concepts, and therefore they have been analyzed using several questions. We feel that we have gained a sufficient level of content validity. A higher content validity could have been achieved if only “cannibalization” was studied. But, this would mean a lower understanding of important factors that also are of the producers concerns. Our impression is
that these are all affecting each other, in accordance with the systems approach (see 3.4.4). Therefore, in the trade-off between content validity and better systems understanding, we feel the design of the research is balanced also taking the time available for its completion in consideration.

Construct validity is the type of validity that takes on the question if the instrument chosen actually is measuring what is intended. This is the type of validity that is most difficult to establish. But, it is still vital to scientific progress. An area in which a clear risk for misunderstanding that would have impact on our results is connected to questions on the financial theme. E.g. when the cost of the investment in the Internet sales channel is asked about, the respondents could use different meanings of terms and how the cost are defined. To avoid having a figure that represented something else than we intended, follow up questions were used to make sure that the same definitions were used. Furthermore, internal consistency is necessary. The set of measurements that together are gauging the construct should not give contradictory suggestions. During the research process, we have paid attention to this risk and we have not discovered any case of this kind of inconsistency.

The external validity of the research, i.e. the ability to generalize, is limited as mentioned above due to the systems view, but analogies can be made (Arbnor & Bjerke, 1994). By describing the research process and method, we hope to make it possible for the reader to judge if the findings are applicable. Our opinion is that it is up to the reader to make the judgement in a similar vain that lawyers and physicians work with cases (Merriam, 1994). We also believe that the possibility to generalize increases with the use of multiple cases, as done in this study.

3.7.2 Reliability

Beside validity, the reliability can also give an indication of the quality of the method. Reliability is different from validity in that the correlation between the measurements of the same variable is gauged using preferably the same method, or methods that are as similar as possible. It measures the possible inconsistency the specific instrument might produce. (Compare with validity, which assessed accuracy when as different methods as possible was used. If the measure was

\[10\] A construct is often unobservable e.g personality. In order to be able to communicate judgements of constructs they are defined in terms of a set of obeservables.
valid, it made an accurate assessment of the variable measured, i.e. the reliability should also be high). (Churchill, 1995)

Since we interviewed people from the US, there is a risk for errors in the collection of data. Our instruments used were face-to-face or telephone interviews. Before our interviews started, we gave the respondent instructions to indicate when he/she did not understand the question. When this happened we rephrased the question and from the answers, we made the judgement that, this was not a problem in the end. Since an interview guide was used the variation in the way to pose questions is lessened and enables another interviewer to repeat the same interview similarly enough to get the same answers. Random factors, e.g. that the respondents have guessed, should not affect the results negatively. Our impression is that when the respondents gave a speculative answer they indicated that this was what they were doing.

One other critical point is the choice of literature and its interpretation. There are many possible sources of error, e.g. the literature is too old, not relevant to the study, no access to relevant books and articles, and too few references. All the books and articles we have used are subjectively chosen and the circumstances may have decided which information was available. Since Internet is such a new phenomenon we had hard time to find relevant information, there is little written about our problem area. Therefore, we started with the information we had and used sources from these and worked our way from there. When reading the books and articles there is risk of misinterpretation what the authors wanted to say. Much of the literature was in English, which is our second language. After consideration, we believe that it has not made the conclusions less valid.

3.8 Critic of method

The systems view requires the researcher to study all parts of the system. By failing to study one factor the result as a whole can be false. The reason for this is the interlinkage and synergies that cause the sum differ from the “value” of the parts. By removing one component, the relations and some of the synergies might be removed. (Arbnor & Bjerke, 1994). Since we did not get primary data on the customers/travelers from interviews or other sources this might have had a negative effect on the quality of findings. However, this issue has somewhat been addressed by getting information from other actors on their perception on what influence the customers/travelers etc. A downside is that the information was already filtered, interpreted and recodified by the second source.
A case study implies entering the study object in a deeper way than what we have been able to due to the time constraints. Consequently, it might be better to call it a “case like approach”. We believe that with a longer time and more material collected there is a kind of marginal effect on the contribution that it brings. Moreover, with our information needs in mind, our judgement is that we would still come to the same conclusions from our research even with increased amount of empirical data.

The next chapter, “frame of reference” will outline the theories and secondary empirical data we have chosen to use in our research.
4 Frame of Reference

In this chapter, theories and empirically based models useful to the study are presented. The frame of reference is divided into four themes. First we examine the theme “Decision Situation” including the change process, the decision process and distribution channel. Then we present the themes, “Relationships”, “Added Value“ and Financials” to understand their implications on the airline industry.

4.1 The Decision Situation

Since this research is describing the decision situation managers face when they are about to implement Internet as a new sales channel, this chapter will begin with the changes occurring and how a decision process may look like.

4.1.1 Change

The previous chapters pointed out the changes occurring and the need for lowering the distribution costs. This brings attention to further understanding change as a phenomenon. ”Change is the only constant”, is a common statement nowadays, everywhere we look we see change. Changes occur due to several factors, e.g. new technology, political systems, economic systems, organizational structures etc. Today’s organizations have to deal with complex problems on a global scale, which may threaten the future of their market positions. The organizations that will survive will be the ones who recognize that business is not a war, it is about relations and cooperation between organizations, people and countries. (Zineldin, 1997)

To understand strategic change, Hellgren & Melin (1991) express the importance of having a long-term perspective. The importance of that is the possibility to see the changes over a longer time span and thereby give guidelines for future strategies. The authors state that there are two different aspects of strategic changes, the degree of change intensity, and the degree of voluntarism in taken actions. Organizations face either revolutionary changes or there are incremental refinements of current strategies, continuous adoption. Organizations often have periods with small steps, which are interrupted, by shorter periods of revolutionary changes, transformation of strategy, structure, and culture. The second dimension looks at the organizations if they have to change due to external changes obvious in the industry, reactors, or if they seek new opportunities and directions, proactors, see figure 13. But, whether or not the change is revolutionary or continuous, coming from external or internal
forces, managing change is difficult. It is hard to plan for the future, but managers cannot wait for the future either, they need to look ahead and not be left behind. (Brown & Eisenhardt, 1998)

Figure 13: Four types of strategic change. Hellgren & Melin (1991)

This figure gives us four different types of strategic changes. In quadrant 1, organizations act proactive and revolutionary despite not facing any severe problems. Organizations in quadrant 2 are facing crises, which force them to make considerable changes in their strategy. In quadrant 3 and 4 organizations are either strengthen or defending their position with small continuous adjustments. By looking at strategic processes this way we can easier understand the complexity and dynamics of strategic changes and thereby use strategy as a flexible tool to carry through strategic changes when necessary. If managers understand their own company’s strategic changes over time, it may help them to anticipate future changes.

According to Brown & Eisenhardt (1998), the key strategic challenge is to manage change. How this is managed depends on which strategy an organization adopt to. They divide and explore three different levels of strategies where the first two are defensive, reaction and anticipating, and the third one is to lead the change in the industry. The last one is to favor, when organizations can change the rules of the game in the industry. This is supported by Hellgren & Melin (1991) as describe in the field-of-force metaphor, an arena with organizations in an industry, competing and collaboration with one another. The
rules of the game are decided by how the organizations in the industry are acting. If an organization take a leading role, they will dominate their market and be the one who decides the pace of change in the industry.

Hamel & Prahlad (1994) are also emphasizing the importance of an organization having a leading role in its industry.

“In order to keep its lead, companies sooner or later needs to renew its leadership role, in order to renew its leadership role it must renew its industry, and to renew its industry it has to renew its strategy” (Wigblad, 1998, p 17).

Since change is the only constant, organizations need to be proactive and take a leading role, and by doing so, they will be on top of change. This makes it interesting to examine, if there is a difference between Sweden and US organizations on how they handled change. Despite the above, changes need to be decided about, the question is how this should be handled in the most efficient way, which will be discussed in section 4.2. First, we introduce one of the characteristics of network economics.

### 4.1.2 Tipping

The network economics paint a picture where the first mover advantage is even more evident when network effects are present. This means that the pressure for change and action is increased not to loose in competitiveness. The phenomenon of “tipping” have been observed in many past situations and refer to the inclination of one system or network to advance in popularity a head of the competitors when it has achieved a critical mass (Katz & Shapiro, 1994).

“If one product or nation in a competitive marketplace gets ahead by ‘chance’, it tends to stay ahead and even increase its lead.” (Arthur, 1994, p 1)

In his more basic model Arthur (1989) show how two technologies experiencing increasing returns cannot coexist in the long run, eventually one must exclude the other. However, Katz & Shapiro (1994) open up for the possibility of multiple networks surviving through product differentiation and consumer heterogeneity. In an early model of network competition (Katz & Shapiro, 1985) they define the consumers valuation during the purchasing decisions as consisting of two parts, the basic willingness to pay for the product and the valuation of the network externalities. The valuation of the network externalities
is derived from the present size of the network and the expected size of the network in the future. Hence, both the differentiation of the product as well as the consumers’ individual needs, traits and perceptions affect the adoption. In addition “historical small events” can have an impact of the outcome (Arthur, 1989). Tipping can take place really fast (Besen & Farell, 1994) and therefore it is important to pay attention to the situation before it occurs. This significance stage appears before the tipping point and momentum (after the tipping point the effort needed to change the competitive situation could be huge). In the traditional industrial context, the momentum indicated significance. This means that significance level is lower in the new economy. (Kelly, 1998) To summarize this section: The first mover has a higher chance of winning the competitive race and to completely eliminate other alternatives. Once a company becomes a network monopolist it has a better position to internalize the value (see 4.4.3) from the size of a network (Katz & Shapiro, 1994). See figure 14.

![Figure 14: Tipping with one surviving product (Arthur, 1989)](image)

### 4.1.3 The Decision Process

"Electronic commerce is with us, like it or not". (Lepore, 1997, p 84)

While there is hype about Internet in the media with several articles published each week, information to facilitate the decision making regarding it is scarce. However, there are opportunities to be gained, such as cost cutting when laying of levels in the traditional distribution channel, selling the products/services directly to the end users, customized products and so forth. But, there are also organizations experience frustration, confusion and unprofitable Internet sites, which makes it harder for managers to make the decision to implement Internet. (Spar, & Bussgang, 1996) It is also known that financial predictions and budgets often fail in a number of ways (Wallander). Furthermore, the uncertainty
avoidance is depending on cultural factors. E.g. Swedes in general have shown less uncertainty avoidance than Americans. (Hofstedt, 1980)

Changes mean that decisions are required in some form, which leads to the need of an insight in how decisions are made – the decision process. Because Internet is such a new phenomenon, and so much is uncertain and confusing, executives have difficulties to decide the best way to use the new channel. Even more difficult is to estimate the returns on Internet investments accurately. Nonetheless, managers need to consider the impact of Internet and try to understand the opportunities available to them as well as the possible threats. To determine the above Ghosh (1998) argue that a systematic research needs to be done.

There are many views about how decision should be conducted and thought of including Ghosh (1998), where the rational model is the most common one. In the rational model managers go through a decision process according to Lekvall & Wahlbin (1993). The first thing a manager needs to consider when facing a problem, is to decide what the objectives are with the decision, and what criterions should be used when evaluating different actions alternatives. The second step is to define the decision process, when it has to be taken, who are involved, what the risks are etc. The third step diagnoses the cause and effects of the problem with the intention to notice the most critical questions at issue. This lead to step four and five, generate action alternatives and then judge the consequences each of the alternatives give. The final step is to choose one of the alternatives, which after the analysis seems to be the best.

Hellgren & Gustavsson (1977) call this process the ”rational model”, and it assumes knowledge and information about all possible alternatives. This is impossible for an individual to manage, today there is no way you can anticipate all the alternatives’ future causes and effects. Kalakota & Whinston (1996) claims that organizations faced with complex decision processes need as much information as possible about the situation to make a rational decision. But information search is often very complex, ”information overload” is often used, organizations are overwhelmed by a huge amount of information. Brunsson (1982) argues that irrational decisions tend to be a basic feature of organizations behavior, no one can be fully rational. Organizations should focus on one or two alternatives to minimize the uncertainties and thereby realize the decision. It is also important to only focus on the positive effects to create enthusiasm and motivation. Further, he argues that it is not hard to make the decision. The problem is to act and to implement the decision. To achieve change you need to
take action. Brunsson suggests that decision making should be separated from action by letting the rational decision making be the bases of ideologies. Doing this it is possible to treat decision rationality and action rationality as two different variables, instead of ends on a continuum. Once ideologies exist, action rationality can be used for forming actions. Major change actions should wait until new ideologies are in place. Since ideologies shift slowly, it can be understandable for the sometimes late responses to treats in the environment, even if they seem obvious.

The study’s aim is to describe the way organizations conduct decisions, deep analysis or focus on action. One important consideration to make is how they, as producers, should handle the relations with their distributors as they bypass them as well as how they are about to handle a multi-channel structure.

### 4.1.4 Distribution channels

The issue of the decisions dealt with in this report is how to handle different distribution channels since the decision in this report is whether to implement Internet as a new sales channel. Therefore, the characteristics of distribution channels are of importance. A general definition of a distribution channel is:

> “...any series of firms or individuals who participate in the flow of goods and services from producer to final consumer” (Coyle et. al, 199, p).

This usually includes a variety of intermediaries, from producer to end users, a structure often determined by economic reasons. Intermediaries are often used because of their efficiency to get the products/services of the producers widely available and accessible to target markets. In addition, their experience, contacts, scale of operation often offer the producers more than they can achieve by themselves. (Kotler, 1997) The value-added intermediaries can offer the end user collection, collation, interpretation and dissemination of vast amounts of information. Many end users think it is more efficient to use a distributor instead of contacting each producer by himself or herself, to avoid “information overload”. (Quele & Klein, 1996) According to Stern & El-Ansary (1988), “intermediaries smooth the flow of goods and services”. The underlying economic factors are the cost savings a producer achieves by using intermediaries. Instead of reaching all customers by themselves, a producer could use intermediaries to reduce the work that must be done. (Kotler, 1997) With the emergence of Internet there may be more efficient for some producers to reach their customers directly.
Distribution channels are often referred to in the literature as either (Coyle et. al, 1992) direct or indirect channels, where the indirect one is equivalent of the traditional distribution channel. Stern & El-Ansary (1988) see the arrangements with indirect channels as a way to improve the efficiency of the distribution process or as a facilitator of the searching process, e.g., travel agents. Indirect channels are normally described as having several levels, e.g. one-level channel, producer-distributor-end user. Each level performs work that brings the product/service closer to the final buyer. (Kotler, 1997) The indirect channel is threatened today by the explosion of direct sales channels such as Internet that provides producers to sell and service customers directly (Vassos, 1996). A factor, not only to cut cost, that drives producers to use direct channels are because they have problems of obtaining information about the end user, and do not have the control they want (Kotler, 1997). Michael Dell supports this:

“Internet actually get you to have a relationship with the customer and that creates valuable information, which, in turn, allows us to leverage our relationships with both suppliers and customers” (Magretta, 1998, p 73).

Producers using multiple channels are today becoming the rule rather than the expectation due to globalization, increased competition, Information technology and so forth. When using direct channels the producers have the possibility to reach the end user more efficiently e.g. by using Internet. (Frazier, 1999) By adopting multiple channels, the producer gains three important benefits: (1) Increased market coverage, (2) lower channel costs, and (3) more customized selling. This is supported by Ghosh (1998) who mean that Internet brings direct, ubiquitous links to anyone anywhere, let producers build interactive relationships with end users and deliver new products/services at very low cost. However, the gains by adding one or more channels come at a price, conflict and control problem. The result of using multiple channels is often organizations competing for the same customers. (Kotler, 1997) The key to success is managing each channel in a way that adds unique value, making each channel compelling in its own competitive environment (Lepore, 1997). But, there are things a producers needs to consider. A distributor often performs three functions: (1) selling, (2) providing after-sale service and (3) extending credit to their customers. In the multi-channel, producers who sell directly to its customers will have to perform the above functions by themselves. A statement of importance is:
“You can eliminate the middleman but you cannot eliminate his functions”. (Stern & El-Ansary, 1988, p 11)

Rayport & Sviokla (1994) support the above, producers need to learn how to do business in the marketspace and carefully examine what they are offering. They need to understand the transition from the marketplace to the marketspace and they will need to seek competitive advantages in one or more of the following areas according to Alba et. al. (1997): (1) distribution efficiency, (2) assortments of complementary merchandise, (3) collection and utilization of customer information, (4) presentation of information through electronic, formats and (5) unique merchandise. The reflection about the above is that some producers may have to adopt multi-channels. The question is how they should manage the different channels to avoid conflict. It also depends on if they are the channel leaders, an issue we will discuss below.

4.1.5 Channel Leader – Power Structure

The emergence of Internet and e-commerce may cause major shifts in the power structure of any industry. There will be winners as well as losers and organizations need to analyze their capability to capitalize on the Internet and determine how they will be affected. In almost every distribution channel, there exist an organization that has more power than others. (Vassos, 1996) The dominant member leads the distribution channel and exercise control (Kotler, 1997). According to Frazier (1999) an organizations power in a relationship is its potential for influence on the other organization’s beliefs, attitudes and behavior. A definition of power according to Thorelli (1986) is:

“...the ability to influence the decision or actions of others”. (Thorelli, 1986 p 38)

Further, he emphasize on the importance of interdependence and trust between organizations. If the producers exercise power over its distributors, the distributors often have the choice to change producers. Nevertheless, in some cases, the producer has a dominant position and the distributors have no choice than to except the rules. It is often assumed that it is the producer who is the leader and that the intermediaries are the followers. The producers have power since they own the product as well as they have the financial resources to maintain product research and development. This is often true when the producer has a strong end-demand and when the distributors are relatively week.

11 The cyberspace or Internet equivalence of the marketplace in the physical world.
However, that is not always the case argue Stern & El-Ansary (1988), distributors may be the ones who manage the relationships in the channel and have the power. One thing is clear, there are no guarantees that the one who has control today will have it tomorrow. The one who has the power in the traditional channel – the producer, the intermediary or the end customer has the power to decide the rules in the industry. What are the factors deciding who has the power and not?

### 4.2 Relationships in the distribution channels

Retaining a good relationship with the middlemen in the traditional sales channel is inevitable. Shifting buyers from one channel to the other is not easily done and does not occur instantaneously. Thus, the producers will remain dependent on the middlemen during a longer time. Retaining a positive relationship could be done in several ways depending on a number of factors as discussed in this section.

“Relationship strategy is often based on mutual trustworthiness, cooperation, shared interest and objectives, closeness, and a commitment to doing business with each other on an ongoing basis.”

Source: Zineldin, M (1997, page 114)

In today’s competitive global environment organizations need to find new ways to get their products/services to their targeted markets. They need constant adoption to its customer’s needs and wishes and keep close contact with them to provide a fast response to changes. It is also extremely important to reduce costs as well as maintain competitive levels of quality and service. Information technology and Internet presents this opportunity for producers, to develop new relationships with end-users at a lower cost. (Zineldin, 1998) This may result in increased tension in and deterioration of channel relationships in the traditional channel. This is especially true in maturing domestic markets as the global competition has created increasingly competitive conditions for channel partners. The pressures of reducing costs and the ability to adapt to changes requires producers to increase their investments in alternative channels of distribution, e.g. Internet, and decrease their investments in their traditional distribution channels. (Siguaw et. al, 1998) Producers may find they have little choice but to risk damaging the relationships they have with their indirect distribution channel because there are no alternatives (Ghosh, 1998). They need to consider how Internet as a new sales channel affect the indirect traditional distributors and what relationship strategy they should have towards each one in the different channels.
Rayport & Sviokla (1994) call this transition an information revolution and argue it will transform the way organizations conduct business. The new marketspace is inevitable and offer the opportunity to create and extract information in a new way. Information about products/services is accessed and absorbed more easily. In addition, it is arranged and priced in different ways. The information can also be separated from the product/service itself and it could be in some cases as critical as the actual product or service. The authors argue that in the marketspace, transaction allows for lower costs, convenience and ubiquity. Today, transactions occur both in the marketplace and marketspace in many organizations. This could mean that producers need no longer rely on their channel members in the future, e.g. distributors, to sell their products/services and maintain the relations with the customers. This could be managed by the producer organization directly as the transactions increase in the marketspace. This could effect the relationship between the producer and its traditional distributors and variables such as trust and commitment need to be considered. The above is supported by Ghosh (1998), established organizations that over decades have carefully built up brands and indirect channels relationships risk damaging all they have created if they start acting in the marketspace.

One strategy to use for easing up possible tensions and counter future global competition is for producers to adopt a market-oriented behavior (Siguaw et. al, 1998). In the general marketing literature, market orientation is the extent to which an organization focuses deeply on the needs and preferences of end customers. It is a well-know concept and research has been undertaken during a longer period by different researchers. There has though been a lack of attention to use this method in the channel relationship context, Siguaw et. al. (1998) are among the first to this kind of research. The way distribution channels are organized and managed will likely influence the market orientation of industries as well as individual organizations. (Frazier, 1999) According to the authors Siguaw et. al. (1998), the best definition of market orientation is the one expressed by Kohli and Jaworski (1990):

“Market orientation is the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it” (Kohli & Jaworski as cited in Siguaw et. al, 1998, p.6).
This definition of market orientation makes the implication for channel relationships more obvious. Further they have developed a model of likely effects and empirically examine the consequences of a producer’s market orientation on the distributor’s market orientation and other channel relationship factors, see figure 15.

Figure 15: Relationships Variables. (Siguaw et. al, 1998)

According to Siguaw et. al (1998) the producers market orientation affect the distributors market orientation and these two sets affect the overall channel relationship. One negative example of this is when a distributor feels compelled to conform to norms established by the producer, it is often common in a channel with a large or well-established producer. If the distributors behave, they will reap higher profits. This is often the case when the distributors act as an agent, e.g. travel agent. They are often forced by the producers to follow their products’ rules and prices. By doing this the agents receive a commission on each product/service sold. (Kotler, 1997) Still, the producer is dependent on the agents to sell their products/services and if the producer has a good relationship with the agents, they are most likely to be favored when the agents recommend their customers their products/services. If the producer starts selling their products/services on Internet they are not solely dependent on the distributor and the cooperation and trust between them two could result in a conflict and the trust may disappear. (Kotler, 1997) This change will not take place instantly, so the producers will still be dependent on its distributors.
INTERNET- A SALES CHANNEL IN THE AIRLINE INDUSTRY

Gordon (1998) support the importance of having a mutual relationship between the producer and its distributors and over the years the producers have developed a relationship with distributors as they are dependent on them to sell their products/services. They are the producers’ channels to the market and it is important for the producers to treat them as if they are their best customers. There are three reasons for this, first you have to win at the channel level before you can win the final customer. Second, the distributors add value to the products and last, they may create new value to the end customer and in some cases cut costs in the distribution channel.

Further, Siguaw et. al (1998) argue that trust is fundamental in relations and requires credibility and benevolence. A common obstacle though in building relationships is lack of trust due to producers reluctance to tell distributors too much about their business or cost structures (Sheridan, 1998). Trust is important in relations and it is often based on reputation, past performance and personal friendships (Thorelli, 1986). If the producer uses market orientation it is likely to increase the distributors trust if they share information with the distributor, convey motives and intentions in advance of actions, and maintain open communications and responsiveness to customer needs. These variables are necessary for increased levels of trust and bring greater credibility and reliability to the trading partners. If the distributor has open communication with its producers, they will probably benefit of a closer, tighter distribution channel relationship. (Siguaw et. al 1998) Duncan & Moriarty (1998) support the above but emphasize the importance of communication; trust and commitment are just products of communication. However, it is possible to have trust before interaction even has started (McKnight et. al, 1998).

If the channel members are market oriented, they put their customers’ needs and wishes at the forefront of organizational concerns. If this is true, a market-orientated producer should be working to satisfy the distributor’s needs and wishes. A non-market-orientation producer may put its own goals and needs ahead of the distributor’s and create a channel conflict rather than cooperative norms. Further, the authors examine if commitment will increase if the producer is market orientated. If so, the producer will devote considerable resources to satisfy the distributor needs. This will result in greater commitment to maintain the relationship. (Siguaw et. al, 1998)

If the distributor is market orientated as well, it will contribute to the relationship between the trading parts as well as having affects on the
distributor’s profitability. A successful market orientated distributor will increase commitment, trust and collaboration as they collect information about customers needs, competitive strategies, market trends, new products and the business environment in general. This gained knowledge about their industry, if communicated to their producers, will influence the commitment to the relationship. (Siguaw et. al, 1998) This is supported by Frazier (1999); channel members will be better off and it may reduce the decision making uncertainty if they share information about their industry.

The results of the study showed that the market orientation of the producer is positively related to the market orientation of the distributor. They found evidence that market orientation is an important and influential force on channel relationships. Trust, commitment and cooperation are the variables of importance in relationships. Siguaw et. al. (1998) These findings are supported by Gummesson (1995), who emphasize that relations between organizations and their stakeholders are fundamental to success. An organization may achieve a strong position in their industry by valuing the relations they have with their customers, suppliers and partners. It is the relation’s duration and retention that becomes essential and not mainly to obtain new relations. Further, Maseiarelli (1998) emphasize trust, value and dialogue to effectively practice relationship management. Between partners, it is important with constant communication, trust and providing value to each other. Thorelli (1986) emphasize the importance of personal relationships since relations are often person-specific rather than firm-specific. All this reflects the need for managers to consider the consequences of implementing Internet as a new sales channel. The relationship with the end customer will be discussed briefly in the next chapter in order to get a basic understanding of it. Still, the emphasis in this study is the relationship between the airlines and the travel agents.

4.2.1 Relationships to the End Customer

Establishing a direct relationship towards the end customer is often an essential driver for implementing Internet as a sales channel. Organizations want to achieve knowledge about their customers needs and desires and develop a relationship with them. This relationship should be a teamwork where both the seller and the end customer benefit from the exchange (Jakobsson, 1995).

“Having a good working relationship between two parties implies that they relate positively to one another, as opposed to just conducting a series of almost anonymous transactions”. (Lovelock as cited in Zineldin, 1997, p 20)
Relationship marketing is about establishing, developing and maintaining successful relational exchanges. Organizations need to identify, understand, and satisfy customers’ needs and wishes to gain successful relationships. Understanding how satisfaction is generated has important implications for management, e.g. products/services delivery, development of new products and services. (Zineldin, 1998) This is especially important in mature markets where a loyal customer is a valuable asset. Organizations should use customer-responsive strategies to be able to collect detailed information about its customers and thereby tailor products/services for them. The fundamental for an organization is to deliver excellence of the products/services. When this is established, personalized interactions are critical for keeping the customers loyal. (Day, 1999) Other authors such as Duncan & Moriarty (1998) emphasize the importance of communication which links people together and creates relationships. Using Internet is an efficient way to communicate and reach your customers, hence organizations have developed a tool to personalize offers to their customers:

“...the Internet will not represent a mass-market such as TV where content is controlled and packaged to a limited number of predefined and geographically homogeneous audiences consisting of millions of viewers. There are no mass-markets on the Internet – only micro communities with distinct histories, rules and concerns.” (Jakobsson, 1995, p)

The time aspect is important since a long-term relationship with specialized offers is hard to brake. Customers are looked in and have difficulties to change suppliers, even if they offer a lower price. One important aspect in relationship marketing is for organizations to handle the customers’ integrity in order to benefit from the relationship. (Datateknik, 25 mars 1999)

Today, it is the often the distributor who has the relationship with the customers. They add value to the different products of the producer and offer the customers a complete range of products/services. (Clemens, 1999) This means they in many cases have monopolized the relationship with the customers. The increasing use of Internet, is a new way for the producer to identify the customers and expand the relationships with them. Organizations using Internet as a new sales channel have the opportunity to develop one-to-one relations with their customers which is of major importance when they need to understand their customers needs and wishes. (Zineldin, 1998) The traditional marketing concept is still important, but there is a big opportunity with Internet. It gives organizations more knowledge about their customers and helps them to adjust
their products and services. Production, delivery and marketing integrate to one whole with Internet and helps organizations to easier segment their customers. Tailor-made mass-production combines economics of scale with individual needs, every customer become its own segment. Internet may become one of the century’s most important marketplace (marketspace) where people are tied together in the new electronic highway. (Gummesson, 1995)

4.3 Added Value

This section focus on the distribution channels ability to facilitate the search process, the other functions of the distribution channels will not be dealt with here. The traditional distribution channel is different from the Internet channel in terms of their ability to add value by the facilitating of the search process. This will be presented in the following subsections by using theories on consumer behavior and purchasing process. The differences between the channels are important to consider when making the decision to implement Internet.

4.3.1 The Purchasing Process

There are several stages in the purchasing process the consumer passes through, not necessarily in a linear fashion, see figure 16. First, need recognition is the required starting point since marketers argue creating needs is not possible. Second, a search for alternatives is done to create a consideration set, either (or both) from external sources or retrieved from memory. Of the identified alternatives in the consideration set the consumer exclude some because they will not considered them at all others are excluded because his/her is indifferent to them. Third, the remaining alternatives in the consideration set are evaluated with the help of evaluation criteria’s and decision rules. Forth, the product is bought and used and fifth, the consumer experience is evaluated. Sixth, a feedback of the experience is given to constitute information to future purchases for the individual consumer, the information is sometimes also passed on to the marketer and other consumers as word-of-mouth etc. Seventh, the consumption process is ended, physical goods are disposed. The consumer background characteristics – demographics, personality, psychographics, lifestyle, culture, values, and reference groups – are affecting the purchasing process as are the behavioral process – motivation, perception, learning, attitude formations, decision making. The choice of product is also affected by situational factors like: physical characteristics (store layout, lighting, noise level, and product displays), enabling conditions (ability to pay and possibility to transport the goods to the usage location), social interactions (salesperson background characteristics, knowledge and attitude. Background characteristics of other
shoppers), and consumer mood (hunger, thirst, anger, disappointment). It is also possible that the usage situation – where, when, and by whom – will affect the choice too. (Wells & Prensky, 1996)

![Diagram of the purchasing process](image)

**Figure 16: The purchasing process (Wells & Prensky, 1996).**

In the purchasing process, the customers consider several risks, consciously or unconsciously. The perceived risks are of five basic types: *Functional*, the risk that the product will not deliver the expected benefits. *Physical*, the risk of physical danger to the consumer. *Financial*, the risk that the product does not justify the money paid. *Social*, the risk that the reference groups the consumer see as positive role models does not approve of the product choice. *Psychological*, the risk that the product is not consistent with the consumer’s self-concept or will not please self-esteem needs. The consumers in a number of ways minimize these perceived risks. Information search is perhaps the most important one. Both increased quantity and quality of the information as well as how the information is handled, affect the risk level. The price itself alone is also known to form the basis of the purchase decision in some instances. Brand image and vendor image can sometimes serve as a guarantee when sufficient information is lacking. (Wells & Prensky, 1996). This is supported by Bark (1999b), brands can increase the comfort of buying from the Internet:
“Travel is an abstract product and Internet is an abstract media. This creates a double abstraction level which makes the purchase of a trip through a travel agent with a well known brand feel more comfortable.” (Åsa Streling as cited in Bark, 1999b)

The level of the perceived risk is one important factor that determines how extensive the purchasing process is. A second factor is the level of involvement for the product/service the consumer has.

### 4.3.2 High- and Low Involvement Products

The character of the product is one of the many things that renders the extensiveness of the purchasing decision process, see figure 17. A low involvement product is often low cost and commoditized, like computer, CDs, and books. These were early gaining high sales volume on the Internet while the high-involvement products were lagging behind (Business Week, 1998). This might lead to the conclusion that Internet is not for high-involvement products.

**Figure 17: Decision making process of a consumer can be described as extensive, limited and routine depending of several factors, (Wells & Prensky, 1996)**

Generally, many consumers hesitate to buy high-involvement purchases because first, the time needed to make the purchasing decision is not available. Second, they need information, advice or consent. Third, there may be a higher risk perceived (functional, financial, social, and psychological risk). Fourth, the shopping experience is not enjoyable and fifth, product changes like lower price or improvements are awaited. Lastly, disposal of the product at home that the intended new purchase is substituting is needed. (Assadi, 1998)
“The greatest marketing advantage of the Internet is its ability to facilitate, simplify and accelerate the high-involvement buying process.” (Assadi, 1998, p 9)

An intelligently configured Internet sales channel can solve the first three hurdles and ease the last two. It is therefore suggested that the Internet sales channel are well suited to vendor high-involvement products and especially car sales – the product consumers have stated to be the least satisfying of any shopping experience. (Assadi, 1998).

4.3.3 Channel Format and the Purchasing Process
The sales channel format is showing different abilities to support the customer in the purchasing process in regards to gathering, screening and evaluating information on products:

“Retailers and retail formats compete in the types of information they convey effectively to customers.” (Alba et al, 1997, p 40).

Providing Alternatives for Consideration
In economic search theory the number of alternatives available for consideration are positively correlated to the utility of the chosen alternative. Yet, research shows that consumers quickly reach a point where the expected cost of considering additional alternatives exceeds the potential increase in benefits. When further alternatives are examined the benefits of additional alternatives gets incremental while in the same time the search cost increases. This suggests that the possibility for an online store to increase the number of alternatives (since it is not limited by store space) does not alone constitute a major reason for its adoption. The reason is that the consumer might see the added alternatives as just added search costs if they do not offer any substantial advantage. (Alba et al, 1997).

Forming the consideration set
Screening alternatives to form the consideration set is done in order to form a smaller set, which is easier to handle (also see the purchasing process above). Doing this, the consumer uses prior beliefs and preferences. These evaluation criteria’s and decision rules can be stored in a consumer profile by the online retailer, it can also be developed and fine-tuned from interactions and purchases. This enable more alternatives to be screened and still produce a reasonable size of the consideration set. Provided that the automatic screening is highly correlated to the individual consumer’s specific utility function, it can be trusted.
to deliver alternatives that are close to the choices the consumer would have made if all alternatives in the universe were inspected. When the consumer uses an offline retailer, the choice of stores with its set selection of alternatives together with the information filtering and advises of sales representative help to produce a smaller consideration set. Research indicates that even when buying expensive durables consumers rarely visit more than one or two outlets. (Alba et al, 1997)

Selecting From the Consideration Set

When the consumer makes the choice from the consideration set and purchases a product he/she tries to predict how satisfied he/she would be with it. With a larger quantity of information, the consumer is in a better position to make an informed choice maximizing the utility, but this adds to the processing cost and there is a risk of information overload. An online retailer uses interactivity and personalizes the information given to the consumer. The goal is select and present information that matters to this individual person and not the kind that mainly adds on to the process costs. The sales representative of the offline retailer also serves this function, the knowledgeable sales person interact with the customer and provide information that is of importance to him/her. A disadvantage for the traditional retailer is that the human capital that the sales representatives form is loosely coupled with the organization with an employment contract. If the representative decides to leave the training and experience gathering of the replacement representative is costly and time consuming. The online retailer has the knowledge stored in structural capital (Edvinsson, 1998) and is not as sensitive in this manner. The quality of the attribute information is a measurement of the usefulness of the information in predicting the satisfaction of the potential product choice. This depends on the consumer’s inference rules and the consumer’s confidence in the reliability of these rules. (Alba et al, 1997)

For different types of products, the possibility to make the satisfaction prediction varies. Search goods are those of which the prediction can be done easily in advance of the purchase. By contrast, with experience goods it is difficult to evaluate the satisfaction before purchase and usage. There are also a third kind for which it is difficult to assess the quality even after repeated purchase and use, these are called credence goods. However, all goods have characteristics that are combinations of search, experience, or credence goods. Depending on

\(^{12}\) “Universe” refers to all of the products of the same kind available in the market of which screening is done to form the consideration set.
the benefits that are important to the consumer and the inferences he/she make about predictably of satisfaction the very same product can be more of one of the three alternative kinds of goods in that. The different retail formats have different ability to inform the customer of the attributes of importance to the satisfaction, as argued above. This leads to the possibility for the different attributes of a product to be search attributes in one retail format but experience attributes in another. (Alba et. al, 1997)

The acquisition and processing of information the consumer makes, is done in the easiest way possible within the limitations of the information format. The consumer seeks maximum flexibility that enable to either do a attribute- or alternative based processing, this is one reason for favoring one information format/channel over the other. Consumers that are inexperienced with the product class appreciate formats that allow attribute-based processing, while the expert consumer rely more on alternative-based processing. This is since the experienced user knows which level of an attribute that is required to be attractive without having to rely on relative information to make this judgement. The initial decision phase involving attribute-based, side-by-side comparisons would be made easier if an efficient screening mechanism is available to the consumer to reduce this effortful step. The Internet format could provide this assistance, research has showed positive results with electronic consumer information systems:

“By making information such as product ratings readily available and simpler to process, electronic information system should serve to enhance information search and use in purchase decisions.” (Widing, & Talarzyk, 1993, p)

The electronic information-handling feature would enable the consumer to learn and use more information during the purchasing process. This electronic help would thus increase the precision of the decision process and the product choice. It would also mean that the decision making would approach the ideal rational decision-making (Brunsson, 1982). We will call this electronic intermediary function a vertical facilitator, see figure 19. Focusing on simplifying for the decision-maker rather than the accuracy has been suggested since limiting effort is prioritized in the effort-accuracy trade-off. The analogical situation with decision making in organizations, where action rationality is favored to the disadvantage of decision rationality, support this observation (Brunsson, 1982). Increasing the number of alternatives to a choice set can cause the consumer to delay their decision – it is thought to maybe lead the customer to believe that even better alternatives are remaining to be evaluated. A second source of
distraction in the purchasing process could be an over-worked and too rich presentation of the information. The “bells and whistles” might draw a way the attention from the product to the peripheral cues. (Alba et al, 1997). For a summary of the retail formats capabilities in the different steps in the purchasing process, see figure 18.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Department Store</th>
<th>Category Specialist</th>
<th>1997’s Internet Retailer</th>
<th>IHS Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Alternatives for Consideration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Categories</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>Low or High</td>
</tr>
<tr>
<td>Alternatives per Category</td>
<td>Low</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Screening Alternatives to Form Consideration Set</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Selecting Consideration Set</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Providing Information for Selecting from Consideration Set</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantity</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Quality</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Low or High</td>
</tr>
<tr>
<td>Comparing Alternatives</td>
<td>Medium</td>
<td>High</td>
<td>Low</td>
<td>Depends on Supplier</td>
</tr>
</tbody>
</table>

Figure 18: Capabilities of the department store, category specialist, 1997’s Internet retailer, and IHS format (Internet Home Shopping, a shopping agent powered on-line channel) to assist the information gathering and handling in the purchasing process. (Developed from Alba et al, 1997).

The lessons learned using the purchasing process perspective implies some key findings on the character of a successful on-line sales channel (Alba et. al, 1997):

1. *Vast selection*: Fast and comprehensive inspection of an expanded set of alternatives is needed to offer an advantage over the traditional retail format.
2. *Screening*: With the enlarged set of options, an efficient way of screening these is important due to the trade-off between effort and accuracy.
3. *Reliability*: The format must enable the consumer to better evaluate the benefits of the product consumption in advance of the purchase, unless the consumer accepts this risk. Easily obtainable and unambiguous information, such as price, that differentiate the alternatives at hand, is weighted higher in general by the decision maker.
4. *Product comparison*: Each consumer must have the basis of the comparison of alternatives individualized to make the system work like how the
consumer wants to make decisions. One step in this direction could be segmenting customers (also see Widing & Talarzyk, 1993). It might even be the case that the on-line format does not support all customers’ purchasing processes and this imply that the customers want multiple channels.

5. Price impact: Provided that the consumers perceive quality related information as important and the benefits of the different brands varies, the on-line sales format can increase the price premium because of the better information processing offered the consumer.

![Diagram of vertical facilitator](image)

**Figure 19:** The vertical facilitator is calibrated by the buyer and taught which preferences and decision rules that he/she wants to be used. The facilitator who selects the best choice for the buyer contacts a vast selection of producers with many different products within the same vertical industry (Own development, Alba et. al, 1997).

### 4.3.4 Meta intermediaries

According to Sawhney (1999), a common view of Internet is that it will bring an extensive disintermediation. The discussion often takes a “black and white” form. However, the disintermediation could also mean taking over only some of the functions an intermediary performs. To understand some possible outcomes it is useful to look at what the Internet does. First, the Internet connects organizations and individuals without constraints to time, space or hardware/software platforms. Second, the Internet also separates:

> “Just as videocassette recorders allowed consumers to separate the transmission and the viewing of television programs, so the Internet allows the customers to separate channel flows in exchanges.” (Sawhney, 1999, p 5).

In the physical world vertically integrated middlemen often offer information bundled with the physical product as well as core products together with
complementary products. Internet enables separation of information from the core product, and the core product from the complementary products. The integrated mediators of the physical world can be replaced by a new combination of mediators, “marketspace mediators” that manages information flows, and “marketplace mediators” who manages physical flows. This deconstruction might not be a good solution for the customer. Even if it means lower cost offerings, the search and evaluation cost might be higher. It is therefore argued that the Internet will perform a third function, realigning. The vertical chain that have been broken into fragments will be put together again in a different shape. Instead of being organized by industry, it will be grouped across the borders of industries. While organizations have been thinking of products, the customers think in terms of activities. This give birth to meta intermediaries that support the customers by offering a cluster of cognitively related activities. These meta intermediaries operate in the marketspace as a liaison between the way customers mentally bundles activities and the marketplace. A meta market requires some conditions to be feasible:

- There is a cluster of related activities that is not too limited.
- These activities are take time from the customers and they have an important economical impact.
- The customers are forced to gather information from several sources to conduct the activities.
- The customers also need to interact with many service and product providers across several industries.
- The present integrated middlemen are inefficient and the buying experience is uncomfortable.

Some examples of meta markets could be: Childbirth, wedding, gardening, home ownership, and auto ownership, see figure 20. These meta intermediaries are closer to the customer than the producers, and they facilitate the exchanges, but they do not participate in the actual transaction of the product. While the old middlemen bundled product and service offerings from the provider perspective, the meta intermediaries bundles the activities from the customer perspective. In contrast, the pure meta intermediary do not have any product ownership. By being the single point of contact between the customers and providers, the intermediaries gain ownership of the customers. (Sawhney, 1999)
4.3.5 Learning Relationship

The previous two concepts, vertical facilitators and meta intermediaries, focused on the search and evaluation of products to ensure the fulfillment of customer needs. There is a third concept, the learning relationship, that takes a different approach and try to change the product itself:

“Customers, whether consumers or businesses, do not want more choices. They want exactly what they want – when, where, and how they want it – and technology now makes it possible for companies to give it to them”. (Pine et al, 1999, p 103)

A learning relationship is sought after in which the organization continuously learns more as the interaction continues with one-to-one marketing, see figure 21. This concept also requires a stronger product ownership because of the constant alteration of products, the mass customization. A lock-in (Shapiro & Varian, 1998) is created because after some time of interaction, the customer has spent time and energy to teach the producer what he/she wants. This process might be too tedious to go through again with a competitor. I.e. the producer gains customer ownership. It might be too costly for the producer to establish a relationship according to this concept with all its customers. There are two ways to handle this, either to limit to the most frequent and profitable customers, or to establish the relationship with intermediaries instead. Products that are especially suitable for mass customization are; complex products or services.

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13 Customization means manufacturing a product or delivering a service in response to a particular customer’s needs, and mass customization means doing it in a cost-effective way.” (Pine et al, 1999, p 105)
expensive items, digitizable products and services, on-line services, luxury and specialty products, and retailing services. Retailers often offer services and not products per se, and services can be mass-customized more easily than products. The producer has an advantage over the retailer in building a learning relationship when; the customer frequently buys the same type of product, the product can be economically delivered, or the customer values the relationship with the product or brand.

![Diagram](Image)

**Figure 21:** In the learning relationship, the buyer “teach” the seller what he/she wants the product to be like. The seller in turn, sends a response back inform of a single product. As this cycle continues, higher and higher level of need satisfaction is created. (Own development, Pine et. Al, 1999).

### 4.3.6 Information Contagion

The network economics is again useful in our themes. Value can be added using a specific kind of network effect. It can be deployed in conjunction with (or separately from) the previous concepts to strengthen the customer ownership. The special phenomenon presented by Arthur and Land (1994) called *information contagion* is related to the earlier discussed purchasing process with information gathering and evaluation. Information contagion is the:

> “...informationally generated linkage between a product’s prevalence and its likelihood of purchase...” (Arthur & Lane, 1994, p 70).

When the buyer is risk-averse, he/she prefers products they know more about. To lower the uncertainty about the level of satisfaction a purchase will bring, previous buyers can be asked about their experiences and thoughts on the product, see figure 22. This could fill out missing parts in the information otherwise available. The likelihood for a product to be chosen for purchase then depends on whom the prospective buyer will talk to. Who this person is, in terms of which product he/she have purchased himself, in turn depends on the market share of the product already achieved. I.e. which product the prospective buyer purchases depends on the information communicated from earlier buyers, and the information he/she is faced with depends on their earlier choices. Information contagion does not affect the value of the product, as some other
mechanisms previously discussed in this chapter it is limited to the information the prospective buyer can obtain about them. The information feedback could in some instances be what determines which product that will get market dominance, even if the products were undifferentiated and the otherwise available information presented them as equal. (Arthur & Lane, 1994)

![Diagram of Information Contagion](image)

**Figure 22: Information Contagion (Own development, Arthur & Land, 1994; Armstrong, 1996).**

Information contagion give advantage to the product which have received a lead in the market since it insures a higher share of voice that reach the prospective buyer from the previous buyers. The communicating process can be leveraged by the seller if a community (Armstrong, 1996) is managed containing these actors.

### 4.3.7 Summery

IHS, the facilitating relationship described in 4.3.3 involves a vast number of products the buyer is helped to choosing from. These are not customized to his/her needs necessarily. In our case, the important part of the facilitating relationship is the gathering and processing of product information. (Alba, 1997) When this concept is applied in one single industry in which the facilitator is part of the vertical chain, we label this concept the *vertical facilitating relationship*. In this case, the product ownership is not needed, and customer ownership is created.

The next concept introduced was the *meta facilitating relationship*. It distinguishes from the vertical facilitating relationship in that it: First, operates across industries. And second, it is based on the cluster of related activities in the minds of the consumer, instead of having a starting point with a set of products that the consumer have different ideas about how to evaluate. Thus, it
has taken the customer focus one step further. (Sawhney, 1999) This concept does not need product ownership to be viable, and results in customer ownership.

The concept of a learning relationship (Pine et. al, 1995) is when the seller customizes the product based on the information the buyer provides. After each purchase and use, the seller receives feedback on how well it supported the customer’s needs. I.e. there is a loop including the product and the feedback between the seller and the buyer. There is not a choice between several different products the buyer has to choose from. Instead, the seller provides one single product that is customized. Product ownership is required for the seller, and customer ownership develops.

When there are other buyers that can provide information to a buyer in the purchasing process that positively contribute to perform it successfully, there is a situation with information contagion (Arthur & Land, 1994). The number of previous other buyers that contribute are positively correlated to the usefulness of the information. This process can be leveraged by the seller if he/she owns and manages a community (Armstrong, 1996) containing those buyers. Provided that the members of the community perceive the community valuable it could mean customer ownership for the community manager. Since it is not possible to control exactly what the other buyers are communicating to the individual buyer we see this form as having a lower level of customer ownership than the previous three concepts.

The previous described the different buyer management mechanisms that could be used to take ownership of the customer. These imply a different level of product ownership. This allows three of the mechanisms to be described in a matrix, see figure 23. Traditional strategies are also included; target relationship means mass marketing typically by a producer to a target audience and broker relationship means a middleman without strong ties to either seller or buyer.
Figure 23: The GR product/customer ownership matrix show different strategic opportunities in the seller/customer relationship. (Own development using Pine, 1995; Alba, 1997, Sawhney, 1999).

4.4 Financials

The frame of reference covering this theme begins with a traditional approach to the investment analysis of the Internet investment and ends with an expanded approach.

4.4.1 Initial Investment Establishing an Internet Site

The initially investment necessary for establishing an Internet site has several components e.g. hardware, software, expertise consulting services, and cost due to having to make changes to the legacy systems. The hardware cost is often easy to evaluate, it is more difficult with the consulting costs since all of the associated costs are determined in large by the type of site that is created. To add to the confusion on costs, the offered price from Internet consultants for the very same project – described in detail – can differ with a factor five (Vikström, 1998).

4.4.2 Annual Costs

The level of traffic volume for the site is directly inducing different cost levels for many reasons e.g. Web hosting and payment. Organizations sometimes choose not to use their own hardware for their Internet site. The advantages of outsourcing include maintenance and service support benefits. This Web site hosting is used by small and large organizations alike. In addition, the level of traffic influences the cost of this service since it requires different levels of
bandwidth[^14]. One example is when the credit card transactions lowered to one half when shifting from an outsourced service solution to an in-house product solution, when more than 6000 transactions per months are processed (Klemov, 1999).

### 4.4.3 Metcalf’s law

The revenues that can be expected are correlated to the value the customers perceive is offered by the product, this since they are willing to pay more for a product with higher value. The theories on network economics describe how a part of the value of the product offering is created. This value contribution is the network effects earlier introduced, one way of capturing them is with “Metcalf’s law”. Bob Metcalf formulated the law describing the value of a network as the square of the number of members of the network, value = $n^2-n$. Assume that the value of the network for one user is $1 if it consist of one other user. This means that a network with ten members would give a value of about $100. A network with 100 members means a value of about $10 000. The tenfold increase in members results in a 100-fold increase in value. He based the idea on observations on the telephone network. The Internet network and personal real life networks alike enables multiple way connections, not just a two-way connection which was the case of the phone when the law was formulated in 1980. This implies that the value is actually underestimated in spite of the dramatically increasing value with the increase of volume. (Kelly, 1998; Shapiro & Varian, 1998). Leibowitz & Margolis (1994) point out that there is a cap for how much this value can increase, see figure 24.

![Figure 24: According to Metcalf’s law the value increases by a square while the number of members increase linearly. As more members join in the demand increases (Kelly, 1998; Shapiro & Varian, 1998).](image)

[^14]: Bandwidth is the amount of information per time unit transmitted.
The influence of other users on the individual user’s value is called “positive consumption externalities”. It is not clear if these actually are externalities or rather should be labeled network effects. Since it is outside the scope of this thesis we just make a note of it and use the term each author has chosen:

“While network effects are common and important, network externalities as market failures, we will argue, are theoretically fragile and empirically undocumented.” (Leibowitz & Margolis, 1994, p 134-135).

Positive externalities are derived from a number of sources:

1. Direct effects, these include the communications technologies like the telephone, fax and Internet. The size of the network is in large defining the value the utility. It is easy to understand that a telephone with which you can reach half the population on earth is more valuable than a telephone that only give you access to one other telephone holder.

2. Indirect effects, these refer to the dependency between complementary goods. Consider the computer where the number of compatible hardware purchased affect how much software that will be available on the market for the specific platform. The computer by itself has no use unless there is software to run on it. (Katz & Shapiro, 1985)

4.4.4 Switching Costs/Lock-In

The process of lock-in has been described in a "lock-in cycle", see figure 25. Initially the customer evaluates some of the alternative brands available in what is called ”the brand selection” stage. This is followed by a ”sampling” stage in which the customers are allowed to try out one of the products or services offered, maybe with a low price introductory offer. For information providers these kinds of actions are more feasible due to the low marginal cost. If the customer is pleased with the product and chooses to endorse it the next stage sets in, ”entrenchment”. The choice renders a lock-in because of any of a number of possible sources. Some lock-ins that might occur are contractual commitments, durable purchases, brand-specific training, information and databases, specialized suppliers, search costs, and loyalty programs. As time elapses the customer is again entering the brand selection stage. Perhaps the hardware bought earlier is worn out or an important choice of technology paths is needed. From the beginning, no lock-in had yet been established in this brand selection stage, but now as the second cycle commences a legacy of lock-in has
to be considered. (Shapiro & Varian, 1998). Lock-in caused by switching costs are not new, e.g. Porter give a list of a few sources (Porter, 1980).

![Diagram of the lock-in cycle](image)

**Figure 25: Lock-in cycle (Shapiro & Varian, 1998).**

There are opposing views on the role market share plays for the company’s profits in the traditional industrial sector (Buzzell et. al, 1975; Hedlund & Åman, 1985), in the case of network economics with increasing returns the impact of the market share is more unanimously accepted (Arthur, 1989; Besell & Farrell, 1994; Katz & Shapiro, 1985). One of the reasons for it is the tipping that it might cause. The network externalities build up switching costs as the adoption increases. After large enough number of users have become members a “lock-in” is established. Thus, an initial leadership position is of great importance.

### 4.4.5 Consumer downsides

While the network economics have traits that seems positive to the consumer by adding more value there is a different side of the coin. A downside of positive feedback loops is that it can create a self-sustaining system sometimes not in the consumers’ best interest. There may well be other alternative technologies and networks that are actually offering superior qualities to the consumer in the long-run but nevertheless are neglected due to the network effects (Arthur, 1989). This does not have to be the result of irrationality or impatience (Katz & Shapiro, 1986). Another negative aspect is that standardization, i.e. consumers committing to a network, can limit the variety of alternatives (Katz & Shapiro, 1994). Kevin Kelly argue that monopoly sellers are desirable in the network economy, but that the dependence on a single source of innovation is not (Kelly, 1998). This could be true under the prerequisite that the seller is not overcharging for the product. The revenues of an individual company can be negatively affected if the consumers have insight in the fact that a lock-in could prevent them from switching to a competitor in the future. Thus, while lock-in can foster customer loyalty it can also hinder initial customer acquisition.
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4.4.6 Expanded Investment Analysis

Making an investment calculation of an IT investment is often not easy. IBM’s net guru Ivan Wladsky-Berger argue that the reason for the difficulties in finding proof of productivity improvements due to IT investments in organizations, is because the activities have still been done in the same way, but hopefully in a more efficient way. With Internet the ways activities are done is reorganized and better interlinked, therefore the sought after productivity increases should finally materialize. (Sandén, 1998) Since Internet is offering such a wide spread of improvements to the whole organization, it can be treated in a different way. The Swedish EDI organization emphasize that implementation of EDI and other forms of electronic commerce, e.g. over Internet, not should been seen as a technical investment only considering transaction costs. Instead, it is a strategic investment that will affect several of the business functions as well as relationships both internally and externally. Hence, the investment ought to be treated as a new business idea and the corporate vision, beliefs and risk- and insecurity estimations should affect the decision made. (Isaksson & Olsson, 1997)

Others agree that instead of thinking of the IT investment as an expense managed on a project-by-project one should:

“...think of IT as a string of investments that deliver value today and in the future. The value of these future uses can be thought of as the ‘options value’ of IT.” (Applegate, Lynda M, 1999)

These future possibilities enabled by the IT investment, the “IT option”, can be described with analogies to financial options. These options can justify the otherwise unprofitable IT investment since it brings additional benefits to the immediate improvement. This option gives the managers the right to pursue value-added business opportunities enabled by IT:

“...at a lower cost, more quickly and with less inherent risk throughout the useful life of the technology.” (Applegate, Lynda M, 1999)

The value of this option is depending on (with other additional features possible): First, the benefits from the opportunities that might be pursued, which in turn are determined by type and range of business opportunities, and the possibility to seek out opportunities with a higher risk – which often is the case with higher return opportunities. Second, the length of time that these opportunities are available. A peculiarity of IT options, as opposed to financial options, is that it can be exercised numerous times. It is also suggested that one
captured opportunity renders new opportunities making the potential almost seem endless (Kelly, 1998). These opportunities can be categorized to be commerce, content, and community opportunities, see figure 26.

*Commerce* benefits are achieved when key activities in the internal value chain are streamlined, integrated and synchronized. Similarly, these IT-enhanced processes can also give benefits in the external value system such as the distribution channel. *Content* benefits are accomplished when the gathering of information and knowledge located inside or outside the organization is improving the performance of individuals and groups – internal or external to the organization – as they make decisions and take actions. *Community* benefits are successfully created by the facilitator, the organization, when it establishes loyalty and commitment among community members. These members can be internal or external to the organization and the resources they bring – including products, services, information, skills and expertise – must be efficiently leveraged by the facilitator to fulfill the individual and community goals. These three value-creating business opportunities are enabled by the two IT infrastructure opportunities which include platform improvements in addition to the option values. (Applegate, 1999).

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15 The value chain is the chain of activities that add value to the product/service within the organization (Porter, 1985).

16 The value system contains several separate organizations with their value chain, e.g. producer, wholesaler, and retailer (Porter, 1985).
<table>
<thead>
<tr>
<th>Benefit category</th>
<th>Enterprise</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IT infrastructure opportunities</strong></td>
<td>• Decrease the cost and improve the functionality of the company’s information and communication infrastructure.</td>
<td>• Create an efficient, flexible platform for doing business with outside parties.</td>
</tr>
<tr>
<td>Category 1: “Options value”</td>
<td>• Expand the potential of the internal IT platform to create new value-added solutions at a lower cost, in less time and at less risk.</td>
<td>• Expand the potential of shared industry platforms to enable companies to create new value-added solutions at lower cost, in less time and at less risk.</td>
</tr>
<tr>
<td>Category 2: Platform improvements</td>
<td>• Expand the reach of the internal IT platform.</td>
<td>• Expand the reach of shared industry IT platform.</td>
</tr>
<tr>
<td></td>
<td>• Extend the “useful life” of the internal IT platform.</td>
<td>• Extend the useful life of shared industry IT platform.</td>
</tr>
<tr>
<td><strong>Value-creating business opportunities</strong></td>
<td>• Increase the efficiency and effectiveness of organizational processes.</td>
<td>• Increase the effectiveness of existing supply and distribution channels.</td>
</tr>
<tr>
<td>Category 3: Commerce</td>
<td>• Streamline, integrate and synchronize operations.</td>
<td>• Create new channels to new or existing markets.</td>
</tr>
<tr>
<td></td>
<td>• Improve the efficiency and effectiveness of decision making and action at all levels of the organization.</td>
<td>• Exploit the economic value of information by adding value to existing products and services or by creating new ones.</td>
</tr>
<tr>
<td></td>
<td>• Enhance organizational learning.</td>
<td>• Enable “information arbitrage” strategies by serving as an information broker uniting suppliers and buyers within inefficient information markets.</td>
</tr>
<tr>
<td></td>
<td>• Increase the efficiency and effectiveness of training and development</td>
<td>• Establish a position at the center of an electronic market.</td>
</tr>
<tr>
<td>Category 4: Content</td>
<td>• Improve efficiency and effectiveness of workgroups.</td>
<td>• Maintain that position by ensuring the loyalty and commitment of all members of the electronic community.</td>
</tr>
<tr>
<td></td>
<td>• Increase the commitment and loyalty of organizational members (individuals and teams).</td>
<td></td>
</tr>
</tbody>
</table>
4.5 Summery

This chapter began with the decision situation. It included changes that could be described as revolutionary or continuous with a proactive or reactive approach. The “tipping” phenomenon urge rapid action not to lose competitiveness. Changes often require decisions to be made, these can be decision rational or action rational.

Since multiple channels coexists it is important to nourish the relationships in the different channels. The concept market orientation was described where the key issues were trust, commitment, and cooperation.

The added value by the sales channel formats are different. The ability of the channels to support the purchasing process was outlined. Four mechanisms for gaining customer ownership were described.

The traditional investment analysis was expanded to include “IT options”.

Up until now, we have presented the network economics in each theme. This was made to increase the understanding of it as well as to see its effects on each theme we have chosen. The key issues the reader now should have awareness of are summarized in the figure below. In the end of the following two chapters, the network economics perspective will treated as a whole, see figure 27. The reason for this is to get an overall understanding of the concept’s use in the airline industry.

<table>
<thead>
<tr>
<th>Classical Economics</th>
<th>Network Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diminishing Returns</td>
<td>Increasing Returns</td>
</tr>
<tr>
<td>Major changes will be offset by the very reactions they generate</td>
<td>Positive feedback magnifies the effects of small economic shifts</td>
</tr>
<tr>
<td>One predictable equilibrium</td>
<td>Many possible equilibrium points</td>
</tr>
<tr>
<td>“Best” possible outcome chosen</td>
<td>No guarantee “best” outcome is chosen</td>
</tr>
<tr>
<td>Size give economies-of-scale</td>
<td>Size give increased value to products</td>
</tr>
<tr>
<td>Value is based on scarcity</td>
<td>Value is based on plentitude</td>
</tr>
<tr>
<td>Mostly based on natural resources</td>
<td>Mostly based on knowledge and information.</td>
</tr>
</tbody>
</table>

Figure 27: Brief summery of some key differences between classical- and network economics. (Arthur, 1994).
5 Empirical Findings

In this chapter we present the empirical data retrieved during our interviews. This section is organized by the four themes we have chosen. The questions we have asked are mentioned before the synthesis of the answers given. Where there is a difference, the answers of the Swedish and US respondents are separated. Our comments and synthesis are included to simplify the understanding of the data. The network economics was presented in the context it applied to in the introduction and frame of reference chapter (and also summarized in the end, see 4.5). In this chapter and the following, it will be treated separately.

5.1 The decision situation

Our first theme is the decision situation, whether or not to implement Internet as a sales channel. The objective with our questions was to find out how this situation was dealt with.

1. Where was the decision to implement Internet as a new sales channel made in the organization?

The decisions to implement Internet as a new sales channel, that transformed the site from being informational to become transactional, were made in a similar fashion in both the US and Sweden. It was made at the top management level and a common procedure was that the director of distribution had a vision and a broad idea of how Internet could be used. This was presented to the senior management for approval:

"A business case was created where we laid out how much the cost would be and much revenue we thought we would get and so forth. We had to justify it, but the approval came very quickly." Internet Manager, 1U.

Because the investment in Internet might not show a positive ROI in the near future, many respondents pointed out the importance of having support from all the way up to the CEO for the venture:

"The support of upper management is absolutely important. Especially in an airline where so much is focused on reducing costs." Internet Manager, 2U.
The understanding of Internet among the top management is vital to the continuous development of the Internet site since it requires an ongoing investment although positive results have yet not been reached:

"Where all other departments are required to lower their costs, we come back several times a year and ask for more money and get support for it." Internet Manager, 2U.

2. Was it a fast decision or was it thoroughly analyzed?
It has been suggested in the literature that it is important to take actions and, without delay, implement Internet in the organization. This view is shared among the respondents in the US, but the European airlines were more careful and hesitant:

“The top management had decided that we needed to change our distribution strategy, they instructed us to bring forward the best way to do so with consideration to our customer group. Meanwhile a survey among the customers was done. Based on the analysis we understood that Internet is suitable channel to our customers.” Internet Manager, 6E

One European airline took the step after being pushed by their US partner to do so. This also supports the picture of the more hesitant European airlines. The US airlines were quicker on their feet:

"Making the decision was not complicated, did not take long at all, it was actually made simultaneously as the development. Very little time was spent on building consensus about Internet as a new sales channel, that was very quick.” Internet Manager, 1U.

"It can take up to a year to make a decision if a plane should be bought, with Internet it is not possible, it is much more urgent. Decisions are almost made over night. The analysis pales in comparisons with decisions made in other departments.” Internet Manager, 2U.

3. What was the driving force to implement Internet?
The main driving forces mentioned were cutting costs, getting closer to the customer and increase revenue. But, the most important driving force for all airlines interviewed was to cut costs. They are constantly trying to lower their distribution costs, which are a significant part of the overall costs. To eventually
increase revenues was a secondary reason. Since it is not easy to quantify and measure revenues in this case (which sales are additional that would not have been made otherwise?), revenues are not suitable as the primary of key measurement of success:

"The costs in the distribution channel have always been visible, and the question has always been: How shall these be lowered?" Account Manager, 3E.

"It is a survival strategy. There is competition on all destinations... This brings the need to lower the costs.” Account Manager, 2E.

“It was more a money saver than a money maker.” Internet Manager, 3U.

Also, the general societal trend and the fear for competitors’ moves have forced the airlines to implement Internet. In addition, the technology has made it possible to create a direct sales channel. With a direct channel the airline are able to create a direct relationship with the flyer/buyer. The airlines have so far communicated through the travel agent, whether this information is passed on to the flyer/buyer or not is nothing that the airlines have control over. Each travel agent represents several airlines, being promoted the way that the airline prefers, is not obvious:

"[The airline] trusts that the travel agents have 110% understanding of our product, but we have no control over the message the travel agents give to the flyer/buyer.” Distribution Manager, 5E.

The flyers/buyers have new needs and behaviors, demanding easy and accessible bookings. People’s awareness and interest in new technology are also driving forces. The flyer/buyers advantage from using the Internet channel is:

"Time, cost, and quality! In our surveys we found that people want to book where they can save time.” Internet Manager, 6E.

"Internet offered a tremendous reach to our customers and to establish a direct relationship with them. For operational and strategically reasons it is what we call a no brainier. So, the prime reasons were to reduce costs, building customer relationships, and increase sales.” Internet Manager, 1U.
4. Do you see the change as revolutionary or as continuous adaptation?
There is an agreement among the European and US airlines’ representatives that the change is best described as revolutionary, this because that it changes the structure of the travel industry. Since a source of income to the travel agents are taken away from them they are forced to create a new way to generate revenue. One reaction from them is to launch their own Internet sites. Another is to charge the flyer/buyer for the reservation up front. Beside of the structural change in the travel industry, the revolutionary also lies in the change of behavior among the flyer/buyer. During the whole history of commercial aviation tickets have been distributed in the same way:

"We have been selling our tickets over the counter for 50 years. You have called a person or gone to the travel agency. What I am working on is to transform this process to the Internet." Internet Manager, 6E.

A slightly opposing view is that for the airline itself it may not be revolutionary:

"This is nothing revolutionary, strange or mysterious coming from out of space, rather it is simply a new sales channel." Distribution Manager, 1E.

USA

"There has not been any other kind of distribution channel that emerged so quickly as Internet, by all means it was revolutionary." Internet Manager, 1U.

“Certainly not incremental. It is revolutionary in regards to that it is a change of thinking and a real change in attitude. To get focused on the Internet and think about it in the way you have to is revolutionary, because in the traditional industries, such as airlines, the investment and decision making needs to change." Internet Manager, 2U.

From the consumer standpoint it is also revolutionary, the professional skills of the travel agent is taken away and replaced with the Internet. Some of the agents work is conducted by the flyer/buyer:

“...they [the flyer/buyer] calls a professional and they take care of their needs. The Internet takes that professionalism away. Imagine that it would be revolutionary for a doctor if you would not have to see a doctor and you could pull up the Internet and do your own diagnosis.” Liaison Manager, 4U.
5. **Was it a proactive or a reactional change?**

In all the European airlines, it started out as a reaction to the US activities. Now, they claim that their actions are proactive. In contrast to the European airlines, the US airlines said that they think their actions were proactive and likewise they all say that their site is the best one:

> “The airline industry is traditionally very reactive. If some airline offers a special fare others will match it. [The airline] has in general been ahead of the others with regards to the Internet.” Internet Manager, 2U.

6. **What are the barriers to adoption for the Internet sales channel?**

There are barriers that have to be overcome before Internet sales will take off. We have seen during our explorative research that there have been barriers and wanted to know which they were in the airline industry.

**Sweden**

Among the European airlines, there is a mixed view of the barriers and their effects. Security was seen as the largest barrier and many of them did not believe in SET:

> “Security is a big problem that we noticed. Until it is solved and there is a global standard, I do not think we will see any real upswing generally. SET, I do not believe in it. To complicated.” Internet Manager, 6E.

> “The frauds are increasing in general, but it is the banks and the credit card companies that have to take the blow, not the airlines. How the credit card companies and the banks handle the security will determine the future of Internet.” Distribution Manager, 5E

> “The media has exaggerated the danger with on-line payments. Partly because there are secure solutions, and partly because there are alternatives to credit card payments. Bigger issue is how to deliver the goods. But the absolutely obstacle is the customer behavior. Internet Consultant, 10E.

**USA**

Many of the interviewed thought that safety and security are the primary barriers, but also the access to Internet. One survey distributed over the Web with the question: “Why not?” To those who said they have not made any
purchases on-line: At first (July 1998) 60 percent of the customers took issue with credit cards, later (January 1999) it was down to 40 percent. The concerns of the Internet users regarding security is lowering, but is still an issue among them. The airline site owners claim their sites are secure:

“[The airline] has not have any security problems with credit card fraud. The site is secured. Also, even if there would be a situation with fraud, the individual is not liable for that. It is hard to communicate this to people. The needed behavioral change will take place because people want to be more efficient.” Internet Manager, 2U.

“Security is a barrier, a little bit less than two years ago. It is a concern, but it is better and better for every day. The change of consumer behavior is ultimately not an issue. The desire is very high to purchase on Internet. There are some behavior that have to be changed, but the desire to buy is stronger.” Internet Manager, 1U.

“I do not see any danger with security since if you have a reputation as a company and a strong brand, it is not a special issue”. Internet Manager 5U.

5.2 Relationships in the Distribution Channels

Our second theme is the relationships between the airlines and the travel agents as well as to their end users. When the airlines implement Internet as a sales channel, there are factors such as dependence and conflicts airlines need to consider. Historically, the airlines have been dependent on the travel agents, approximately 80% of the tickets are ticketed through the travel agents. The reaction is predictable, the travel agents are not happy since the airlines “steal” their customers.

7. How strong was your dependency on the travel agents when you first started with Internet?

Some of the respondents were carefully emphasizing that they were dependent on the travel agents and did not plan to cut them out. The foreign airlines conducting business in Sweden are very dependent on the travel agents since they are their principal distribution channels to reach the customers. Some do not even have a representation in the host country.

Sweden
“We still see the travel agents as important partners.” Distribution Manager, 4E.

“[The airline] do not choose to ignore the travel agents because they are the once who have the flyer/buyer in their hands.” Distribution Manager, 5E.

**USA**

The response was similar to the European airlines, they are very dependent on travel agents since a lot of the sales go through that channel.

“Our dependence on travel agents is consistent with other airlines in the world, approximately 80% go through the travel agent channel.” Internet Manager, 1U.

“I do not see how an industry can just cut out the middleman all together. To do that, you would be cutting of you nose despite your face.” Internet Manager 5U.

Others were more bold and said that they owned the product and could choose to distribute it however they desire with it:

“[The airline] appreciate the help travel agents provide in distributing our products, but they are our vendors, we can do what we want to, because it is our product.” Internet Manager, 3U.

8. What strategy did you use regarding the relationship with the travel agents as you bypassed them with the Internet channel?

To be able to discuss the situation with the national carrier and the relationships in the distribution channel the labeling of the airline respondents are left out in this section.

**Sweden**

The national carrier in Sweden, SAS, like other national carriers in European countries has a special position in their home market. The reason is that they have dominant market coverage in terms of destinations, domestic and international, as well as a better-developed local distribution network where they are domiciles. While the national carriers can take the charge, the other foreign airline carriers and travel agents are obliged to follow their lead. At the same time as Internet was introduced, SAS lowered the commissions paid to the travel agents. This led to a conflict between the airlines and the travel agents. The foreign airlines have followed, but not lowered the commission to the same
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extent. This means that they do not have the conflict the national carrier is experiencing:

“There is no conflict between us and the travel agent, it is between the national carrier and the travel agency. Much due to them lowering the commissions.” Airline Representative.

“We never undercut our travel agents, we are very carefully about that.” Airline Representative.

“The national carrier has the advantage to decide the rules in the market. They were the first to lower the commission to the travel agencies. As much about half of our flight tickets sales are with the national carrier, which means that we have a strong dependence on the national carrier. Often we can not even find an alternative carrier to the specific destination. Also, it has happened that the flyer/buyer has declined an alternative flight with another carrier that was $1500-$2000 less, just because he wanted the Eurobonus points [frequent flyer miles of the national carrier].” Travel Agency Representative, 8E.

On an organization level, the relationships are handled using instruments such as contracts and economical incentives. But, at the individual level the personal relationship is more emphasized. The personal relation with the manager of the travel agent and the travel consultants is of importance. These are established after several years of interaction:

“The relationship is personal. Our sales representatives visits the travel agents and many of their agents like selling tickets for the ‘person’, not the airline.” Account Manager, 2E

USA

A general perception among the airline representatives is that the relationships with the travel agents have not suffered severely. There is an understanding that the Internet is inevitable. The travel agents have realized that Internet is a reality and they cannot ignore it, and that it will continue to grow. Internet has not dramatically changed the relationship with the travel agents, they are aware of what is happening:
“The travel agents would of course prefer if we did not sell over the Internet. But, they recognize they cannot be upset with us, because they rely on us if they want to stay in business. There was what I would call a mild push back, it was not a significant discussion, I think the travel agent community understood that this was unavoidable.” Internet Manager, 1U.

However, some negative reactions have occurred:

“Some travel agents said: ‘Hey, you are taking our jobs away.’ Others understood that it was the way of the future. Companies today who are resistant to change will loose, everyone in the society has to be flexible.” Internet Manager, 3U

9. What strategy do you have to create loyal flyers/buyers?
Flight security is a fundamental demand of the flyer/buyer. Followed by the timetable, destinations, price and service are the prime aspects in choosing airline. Many respondents agreed that the frequent flyer programs have a strong impact but customers often do not want to admit it:

“Surveys show that frequent flyer programs are not influencing the choice of airline, but I think that the flyer does not want to admit it publicly.” Distribution Manager, 4E.

Others mean that it is the destination and frequency of departures that always constitute the choice:

“It is very hard to keep a flyer loyal. In 99 cases out of 100 it is the destination and frequency that matters.” Distribution Manager, 5E.

USA
Like the European airline representatives, the common opinion is that the frequent flyer programs are instrumental in creating loyalty to the flyer/buyers. Creating lock-ins and barriers to change in other ways are not mentioned by any of them:

“We think that there are a couple of logical ways to create loyalty, one is the frequent flyer program, probably the best way. The second is the ability to continuously improve the product, so you can differentiate yourself that will drive loyalty. Customers look for benefits and the ability to offer incremental mileage points per Web purchase is a way to provide benefits.” Internet Manager, 2U.
10. Is there a difference how the travel agents are able to get knowledge of the flyer/buyer and the airlines?

The travel agents have an incredible knowledge about the customer. They have the personal contact and much of the service add-ons. Many of the respondents in Europe argued that the travel agents have a monopoly on the relationship:

“The relationship that the travel agents have [with the flyer/buyer] is stronger, but it also depends on which travel agent it is. Our frequent flyer database is very good too, we can send e-mails to those of special interest. The precision is sufficient and we can reach those that we want.” Distribution Manager, 4E.

The airlines only know their customers (flyers) through their frequent flyer programs. They only create a relationship with those that the airlines traditionally have had a relationship with and met in the seats of their plans, the flyers. Especially in the case of business trips, the flyer is not the same as the buyer, the one who pays for the trip is often the employer:

“We do not work as much on the buyers. But, we have started to personify them. We have extremely much information on our flyers, it is an incredible amount of data.” Internet Manager, 6E.

Sweden

The general opinion among the airline representatives in Sweden is that the travel agents have a better knowledge of the flyer/buyer. There is also a difference in who the travel agent and airline see as their customer:

“We as a travel agent see the buyer as the customer, while the airline see the flyer as their customer. There is a risk that the airline tries to maximize the price of the ticket since that is in their own interest. We have a fixed fee that we charge the buyer and are not depending on the price of the ticket for our revenue. We try to find the best offer for them.” Airline Supplier Manager, 8E.

USA

Even if the frequent flyer programs are valuable to the airlines it is not all that is needed in understanding the customers needs. On the question if there is a difference and one respondent answered:
“No, in both cases the corporate buyer will give the travel agent or the airline the relevant information about them that is important to facilitate the booking. You see a lot of corporations today in the US that go direct in relationship with suppliers. The information required would be the same the travel agent needs to know. I do not think that the information in the frequent flyer program is enough, a fare amount has to be handed off directly from the corporation to the airline.”

Internet Manager, 1U.

11. Has there been a change in the power structure since the implementation of Internet?

There were different opinions about who presently had the power but most airlines agreed that the flyer/buyer will have the power in the future, since there will be many channels to choose freely from:

“The customer will have the power in the future. It costs [the airline] several millions to create new channels and it is done because we believe that is what the customer wants.” Account Manager, 2E.

“…together with the distribution channel the price will be the most important in the future. Then you reach the customer and then it is he who decides and have the power.” Distribution Manager, 5E.

In an individual local market, the local carrier have a powerful position. (But, in general, over a larger market covering several countries, the flyer/buyer is the strong actor):

“It is not the travel agent who has the power, it is the big national carrier. They have a local network [rout network], which make them strong.” Distribution Manager, 1E.

Some travel agents have a strong confidence though:

“The power will be with the travel agent, of course. Especially if we can offer them supplemental services, such travel administration.” Airline Supplier Manager, 7E.

5.3 Added Value

The third theme we have empathized on is the added value in the different channels. Since the emergence of Internet is partly driven by changing customer
demands, we assume there are customers requiring different benefits in the two channels.

12. Are there any differences in creating value to the flyer/buyer in the different channels?
The indirect channel through the travel agents distinguishes itself from the direct channels; Internet, call centers, and airline ticket offices. When the respondents answer this question, they sometimes speak off the whole direct channel and sometimes the Internet channel specifically. If the flyer/buyer goes to the travel agent he/she gets many alternatives, but might be pushed to buy something that give the travel agent more commission. When the flyer/buyer go directly to the airline he/she knows that he/she gets what he/she wants. The airline also has a deep knowledge about the product. More over, Internet enables the customer to book 24 hours a day, many of these bookings are made non-office hours. Many respondents argued that the most luxurious alternative is the travel agent. But, if the flyers/buyers are willing to do the work themselves, Internet is the better alternative with its flexibility and simplicity.

Everyone wants to create unique channels to their customers, but it is not always that these unique channels help the customers to handle their travelling. To book at an airline sites means that you do not have the invoicing service solved conveniently. In most cases organizations want to have all their travels on one invoice, organized by project, departments, and employment number etc. Statistics from just one airline has a small value, while statistics from all travelling are of major importance.

Sweden

“The best supplemental service is given by the travel agents, but today you have to pay for it. The luxury alternative is the travel agent. This kind of added value is something we cannot compete with, but we do not want to either.” Account Manager, 3E

“The travel agents add more value to the flyer/buyer since they can offer everything e.g. hotels, flights, cars, and boats... The travel agents have a narrow knowledge about these products, but the airline has a deeper one about their own one. The travel agents have a competitive advantage through this.” Distribution Manager, 5E.
“The travel agents take the organization’s travel policy in consideration and more aspects of their concern. The airlines are just interested in filling their seats. The travel agent can give more customer value.” Airline Supplier Manager, 7E.

“Through the Internet we have control over what we are saying, we do not have that through the travel agents” Distribution Manager, 5E.

The Internet gives the flyer/buyer a feeling of control over the purchasing process. In some cases, the assistance of the travel agent is valued higher:

“Consumers use Internet because of convenience and control. Different customers have different needs, so they see value in different ways. The value added for corporate clients is that the Internet gives them more easily information. At the leisure end, value added in form of more convenience shopping fares.” Internet Manager, 1U.

“We are aiming at increasing the possibility for the customers to do self-service. But, some customers still want to have assistance – be hand held. In that case the travel agent might persuade the customers to buy something” Internet Manager, 3U.

“The travel agent channel is huge and it is a channel that customers can trust due to their neutrality, they provide you with the most favorable fare. Especially price sensitive customers are better serviced through the travel agents.” Internet Manager, 2U.

13. Are the possibilities to transmit messages different in the two channels?
Both European and US respondents think it is easier to build brand and customer loyalty using the Internet channel. The reason for this is that they have the control of the message that reach the customers.

Sweden

“When an airline recently crashed they used the site for communicating the latest news on the development of rescue etc. The speed used was a big advantage.” Internet Manager, 6E.
“It is about simplicity in the message. The travel agents make it easy for the customers, while Internet has to be child simple for everybody.” Account Manager, 2E.

USA

The fast dissemination of information Internet can support to the public is also valued in the US. In terms of flow of information, it is a big advantage with Internet. E.g. e-mail notifications about special deals on unsold tickets for flights in just a few days are efficient:

“Certainly, to the extent you can communicate directly to your customers, will allow you to create many types of messages more economically and far more frequently. You will see different messages. Information overload could possibly be a problem in the future.” Internet Manger, 1U.

“When there was an airline strike the amount of users who came to the corporate information section on the site increased from 4 to 20% of all visitors.” Internet Manager, 3U.

“Yes, we have one-to-one marketing on the Internet. We get a lot of information base on what they tell us and based on their behavior. So, we are able to accurately market to those customers. To take general demographics and say: ‘Lets advertise to people between 20 and 35’ – that would be the travel agent approach. The travel agents are able to get to know their customers, and if they are good travel agents, they are able to stay on top with things. But, I believe things are easier to handle when you have the data right in front of you, rather than having to remember it like the travel agents have to do. ” Internet Manager, 3U.

Several of the respondents have also loaded the personalized message that can be transmitted through the Internet, one answered:

“A direct channel is always more efficient. Personalization is an important development, that is possible with Internet.” Internet Manager, 2U.

14. Is there a difference in first gathering information and second evaluating it?
For the moment travel agents have an advantage when it comes to booking complex trips, information about these are easier for customers to get through a travel agent. Knowledge of booking proceeding and available alternatives is still with the travel agent and is not yet transformed to structural capital in form of technical aids.

**Sweden**

“When it comes to the complex trips, the travel agents are better at the search process. You should let the professionals take care of what they are good at.” Distribution Manager, 4E.

**USA**

“Yes, I think there is a difference in a number of ways, the first is that Internet gives the customers the ability to gather information and raise new questions as they pop up, you gather more and more information. This could be done with travel agents as well, but I think people in general do not want to keep asking questions all the time. More information will be gathered if you use the Internet. It is open 24 hours a day. A travel agent filter the information, which is both positive and negative.” Internet Manager, 1U.

“Customers are more confident that their purchasing decision is a good decision because they have access to all the information. That after purchase feelings are more at ease with Internet.” Liaison Manager, 4U.

**15. What kinds of trips (simple/complex) are sold over the Internet?**

This question was asked to support our assumption of the US to be ahead of Europe. We also wanted to verify that there is a difference choice of channels depending on the character of the product:

“It can be confusing for the customers on the Internet because there are so much information they have not seen before.” Internet Manager 5U.

Many of the respondents talked about that there will always be two types of customers, one customer who feels that he/she always want the best deal and he/she will probably go directly to the producers. Then there are customers who prefer a third party, they want to feel more comfortable through advice and
information, they go to the travel agents. This may depend on what kind of trips they are buying, simple or complex.

**Sweden**

Simple trips dominate and people who favor fast ways to book their tickets use the Internet channel. The European airlines, that have not come that far in the sales development on Internet, only sell simple trips today:

“*We only sell simple tickets, nothing else. Most people are able to buy milk by themselves, but if you want some from the deli counter you have to ask for help.*” Account Manager, 3E.

“*Short and packed trips will increase, e.g. parents without children on a weekend get-a-way.*” Distribution Manager, 1E.

Also, what constitute a simple trip is not that clear:

“*If a trip is simple or not depends on the traveler too. The same trip, e.g. from Stockholm to London, is probably considered to be simple to the business traveler but complex to the older retired lady.*” Airline Supplier Manager, 8E.

**USA**

In the US there is a trend towards more complex bookings, but they are still simple:

“*It started out as simple trips, today it is more complex, such as international trips, though simple. The trend is that more complex trips are booked on the Internet, specially now that there are more corporate accounts starting to use Internet.*” Internet Manager, 1U.

“*We only sell simple trips, from A to B. To book a simple trip requires simple knowledge. A complex trip is more efficiently done through a travel agent. But I think that in the future it will be easier to book more complex trips over the Internet.*” Internet Manager, 4U

16. **Is it mostly leisure or business trips sold over the Internet?**

Here we wanted to see if there is a difference in the type of customers in the different channels since many argue Internet is most suited for leisure trips.

**Sweden**
The focus on leisure or business on the Internet is not consistent among the airlines:

“We focus on the business travelers, but since the same flyer is onboard during other times as a leisure traveler we treat them as important too.” Account Manager, 2E.

“The target is leisure and business, but for the Internet it is mostly leisure.” Distribution Manager 1E.

USA

An impression is, that in the US there is more leisure, but it is hard to make a safe conclusion. Most of the respondents thought that in general terms, half of the trips were business, but they had an impression it was more leisure.

“It is little more leisure than commercial, but not significantly squid” Internet manager, 1U.

“The bookings on the Internet mirrors [the airline’s] average trips. Unmanaged business travels go through the Internet channel, corporate bookings with contracts do not.” Internet Manager, 2U.

5.4 Financials

The fourth theme is the financials, what are the costs and revenues when implementing Internet as a sales channel. This is an important factor for managers who are facing the decision to invest in Internet or not. Information on this type of investment is hard to find in general.

17. What does it cost to establish a Web site? What is the cost of the daily up keeping?

The respondents have given us different answers that indicate that the cost structure of the sites is different and situational. A concise answer that pin point the costs is therefore not possible to give. Therefore, we interviewed an Internet consultant to get some kind of indication:
“Many companies do not know why they want to be on the Internet. Sometimes it depends on their competitors that are already on-line. The cost to go on-line depends on its complexity: Interlinkages with business enterprise systems, marketing communication in general and profile.” Internet Consultant, 10E.

Some of the airlines used more than one external consulting company. Typically, one for the graphical designs and navigation etc, and an additional one for integrating the Internet site with the legacy systems that could be from the 1960s-1970s.

**Sweden**

The Swedish respondents did not give any quantitative answers on the investment costs, several of them did not seem to have the numbers:

“Quite a lot I can imagine. There is probably no one who really knows, it is very hard to know. I think that companies investing in IT have no insight of the costs involved.” Distribution Manager, 5E.

“It costs a large amount of money and the senior managers freaks out when they see the figures of the costs. But, the sales will drastically increase, not percent by percent, rather 200-300%.” Distribution Manager, 1E.

**USA**

We believe the US the respondents knew the investment costs, but were secretive about them. It was hard to get all the numbers needed from each airline, therefore a complete picture of the cost structure did not emerge. One reason making it hard to say what the cost of bigger changes are, is that these changes are done continuously in some airlines:

“There are two sorts of ways of looking at it, one way is sort of minor changes, day-to-day operational. This could be done either internally or outsourced. Then there is another type of costs, the overall change of structure for bigger changes. We do the business planning internally, much of the rest is outsourced – site hosting, raw development, and graphical design.” Internet Manager, 1U.
“The initial investment constitute a major cost to the Internet channel that do not exist in other channels. It takes a lot of money. PR firms, programmers, and site infrastructure are hired externally. A constant evaluation is done if the work at hand should be outsourced or done internally.” Internet Manager, 2U.

“The technical development is the major cost, not the marketing of a new release or to think up the ideas. The larger development cost come from the new functionality’s, the daily up keeping is cheap.” Internet Manager, 2U.

The costs to establish a sales site for an airline as discussed above can be compared with a package solution offered by software vendors. These are not as strongly tailored to the individual company but charge for less. An initial charge of $30 000 together with a smaller maintenance fee each month enable the selling of all airlines tickets, a solution used some travel agents.

The airlines all have internal staff working solely with the Internet, its size range from five to thirty people, not including telephone support staff:

“If you have a basic strategy it will probably be 20 people or so. If you are trying to create a new business in this area [the Internet] e.g. Barnes & Nobles, it is more of a business than just a channel extension strategy and investment in people is significantly larger.” Internet Manager, 1U.

Secondary data give further insight on the costs. A Swedish Web Consulting Company estimates the costs to vary between as little as $12,000 to over $1.2 million, depending on the type of site, see figure 28. Even if sites in general have developed from being informational to include participation, some organizations still choose to create “old-stage” types of sites, all depending on the needs of the organization (Icon, 1998).

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17 An old stage site typically only contain information, like a brochure
One Internet Service Provider in the US argue that $16,000 is the cost of an entry-level site, $16,000-$80,000 a medium level site, and a major site cost over $80,000. Mark Desvaux at UUNET, the ISP, say that a major site costing $80,000 to establish would also cost about $100,000 per year in maintenance. (Shillingford, 1999).

A study of 20 midsize to large organizations by Gartner Group came to the conclusion that the average cost of developing a sales enabled e-commerce site is $1 million, this cost is expected to increase 25% annually the next two years. Some of the organizations in the survey spent less than $350,000 and some more than $2 million. None of the organizations said to be on budget and 79% of the costs were labor related (10% software, and 11% hardware). The average development time was five months, but some took up to a year to launch. Most companies used help from two or more external firms. The front and back end of the e-commerce sites meant significant effort in the development, resulting in delays and additional costs. A conclusion from the survey was that the site that was state-of-the-art today will loose its competitive edge in just a few months if the back-end and interactive applications are not kept up with new technology. A second prediction is that there will be three cost categories in the future for launching the site (Gartner Group, 1999):

- $300,000 to $1 million to “Get on the map”. This kind of site is behind most of the industry competitors, but function adequate.
- $1 million to $5 million to “Run with the Pack”. The site has the functionality’s of the industry average.
• $5 million to $20 million to be a “Market Differentiator”. This is the site changes the competitive terms in the industry by raising the bar.

18. What are differences in transaction costs from the traditional channel?
Each airline has given different answers on what the transaction costs are in the respective channels. The lowest cost charged an airline for a transaction through a GDS is 2.7 Euro according to the European Code of Conduct. The airline pays a fee that depends on the service level they requests. The answers have been around $35 (including commission) in the traditional channel and $6 in the Internet channel (depends if a GDS is used):

“A web transaction cost airlines in the range from five dollars to twelve dollars at the high end. It is a difference if you use a GDS or your own CRS and the support to your site. If you have live answering phones the figure will be higher. The commission is also a way that you can save, depending on the approach, you will have different figures.” Internet Manager, 1U.

19. What are the saved alternative costs when selling over the Internet?
An implementation of Internet in the business does not only mean a new way to reach customers. It also brings advantages internally in the form of saved alternative costs. Many airlines said that the Internet channel lifted some of the workload from e.g. call centers, meaning that alternative costs are saved:

Sweden

“We believe the investment will be paid back in a few years due to the costs savings that can be made. Specially information such as catalogs and their print and mailing costs.” Distribution Manager, 1E.

“In addition to the saved GDS and travel agents commission costs there are the alternative costs. The call center is so much more expensive. The operating costs of the new channel is much lower than the other channels.” Internet Manager, 6E.

USA

“We do not know the exact figure, but we know by fact that the costs of the call centers are lowered thanks to the Internet channel.” Internet Manager, 2U.
An example from other industries is Intel, their saved alternative costs include the 45 000 faxes per month they used to receive from customers in Taiwan only. (Foremski, 1999) According to Forrester Research the savings due to electronic commerce usage are estimated be 5% to 10% of the sales, based on an average of early adopters’ experiences from using Internet to create and sell products (Coy, 1998).

20. When did you start to market your Web site? Has it increased during the years?
We asked this question because it has an impact on the success of the site and also constitute a cost.

**Sweden**
Some airlines promote their Internet site while other does not:

“Our communication that we have on-line booking has not been that extensive, we want to make sure we have the back-office set up first. People just happens to pass and log on to our site.” Distribution Manager, 5E

“We are not completely pleased with our site yet, therefore we do not market it that hard. We do not want the customers to be disappointed and not come back.” Distribution Manager, 1E

**USA**
The US airlines have now experienced enough to say which marketing channel is best suited to gain sales through Internet. Many of the respondents have said that direct marketing using e-mail is the most efficient:

“E-mail has proved to be a cost efficient way to market.” Liaison Manager, 4U.

“We have tried all forms of marketing, traditional prints, TV-spots, radio, mileage incentives, and direct mail. We have learned that some work better than others, TV and full print advertising do not, but direct marketing works well. This understanding has actually helped us to decrease our marketing expenses.” Internet Manager, 1U.

“There are some marketing expenses that are fixed, but the bigger amount is connected to the relaunches of the site.” Internet Manager, 2U
“Because of the cost difference [between the channels] we are able to use incentives to make customer use the Internet.” Liaison Manager, 4U.

21. When did the investment with Internet break even? Are your objectives met with Internet?

From a traditional perspective, the assessment of the investment break even is of outmost importance.

**Sweden**

The respondents said that the Internet sales were less or much less than 1% of total sales. The impression from our interviews are that break-even is expected three to five years after the launch of the sales enabled site, but it is not that clear:

“We think that it will pay back in a few years, primarily because of saved [alternative] costs, but also because the pages will not require drastic remakes in the future.” Distribution Manager, 1E.

“We expect a profit operationally after five years [from the launch of the first sales site], I do not even dare to calculate with the investment costs. This is not a turn-key project, the technology will change so we have to continue to revamp it.” Internet Manager, 6E.

“It is hard to know when break-even will come, nobody can predict it.” Distribution Manager, 5E.

**USA**

In the US there are examples of airlines that already have reached brake-even, others still have not. The sales in the Internet channel are about half a billion dollars, or 2-3.5% of total sales. The information on break-even is guarded thoroughly:

“The site has not yet broke-even if you include the investment in form of developments costs.” Internet Manager, 2U.

“Our objectives have been far away exceeded in every perspective, cost cutting, getting closer to the customers and increased sales. We broke-even in a few months. We have paid back the investments, both on the development basis and the operations basis.” Internet Manager, 1U.
“This information is proprietary. But, our revenue projections are met every month, they are even exceeded. In every stage in time our objectives are exceeded. We would definitely not hesitate to make the decision to use Internet again if we were put towards the choice again.” Internet Manager, 3U.

“There is a philosophy that questions if you ever want to break even. If you ever slow down development and you are not spending as much, then you start to theoretically be profitable. But, then you are behind in some type of development. So, we are continuously putting more resources into developing new functionality’s and yet our revenue growth and growth in booking are continuously going beyond what we thought it would be.” Internet Manager, 2U.

A common perception of Internet business has been that “everybody talks about it, but nobody is making a profit”. As an example Amazon.com is often mentioned, since it is well known and has achieved large market share in short time but still make a loss. It is true that it is costly to do online business in at least one sense. An average of about 65% of the revenues of the online retailers is used for marketing and advertising. The offline store equivalent is 4%. This makes up the cost for generating an order $26, compared with $2 for the offline retailer store. The marketing and advertising cost per buyer is $40 in the online case. The logic behind this discrepancy is the intention of the online retailer to secure market share and critical mass. For many organizations their offers are directed to a global market making the potential market substantially larger than the offline store constrained by travel time for the customers to reach the store etc. Amazon.com would have showed a profit (an operating income of $2 million, 1997 and $41 million, 1998) if they only reduced marketing and advertising spending to be in line with their current customer base. Instead, they choose to capture more of the fast growing online community, “finders fee” up to 15% of order value are given (Amazon.com, 1999).

There are some examples of profitable sites. E.g. Sohu, the Chinese catalogue site similar to Yahoo, broke even after 11 months of operation (Kynge, 1999). Regus, the international office-hotel company, have an annual $320,000 budget for their site. In the first year, it brought in inquiries resulting in revenues of $8 million and a four-fold return on investment. (Shillingford). A survey by ActivMedia with end of 1997 figures including 2,069 sites on the Internet, show

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18 Note that a buyer can generate several orders, this is what distinguish the $26 from the $40.
that 46% are profitable today, but these profits are modest. Of the remaining ones, 29% expect to be profitable in 1-2 years, 6% in 3-5 years, and 1% in more than 5 years. The residual 19% say they are currently not trying to generate revenues (Green, 1998). Even if there are some web sites that are profitable many are not. Based only on upfront cost savings versus invested amount, the bottom line – to many managers’ frustration – frequently show negative figures (Stenberg, 1998; Sandén, 1998). From this perspective, it is hard to motivate an investment decision and a different approach might be needed.

22. What are your goals with Internet?
Most airlines have high expectations. There are many key matrixes airlines use in their goal setting, such as sales turn-over and building personal relationships with registered users. Figures that have been mentioned regarding Internet sales turn-over is to have 20% to 60% of the direct sales five years after the launch of the sales enabled site.

Secondary sources with some general figures supplement the vague answers our respondents gave: Cyber Dialogue has presented an estimate that there were 41.5 million surfers visiting commercial sites at the end of 1997. The number of commercial sites is estimated by ActiveMedia to be 414,000 in 1998. (Green, 1998). It is hard to predict the revenues that could be expected. Some guidance on the type of revenues as well as the connection of the number of visitors and sales can be gained from a US survey by Boston Consulting Group. This survey, with 127 organizations responding, indicated that only 5% of the unique visitors to sites became customers and only 2% of all visits resulted in purchases. The revenues per order have increased since the previous year. Of all online revenues, 59% are with the multi-channel retailers that used to sell through traditional channels and have started online sales, e.g. airlines. Compared with the retailers only using the online channel, the multi-channel retailers show superior performance on key issues as revenue growth of online sales 259% versus 161%, repeat buyers of total buyers 26% versus 17%, and buyer conversion rate 6.1% versus 3.0%, see figure 29. (BCG, 1998).

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19 An unique visitor is an individual that visit a webpage, even if he does so several times he is only counted once.
20 A visit is counted each time a webpage is viewed, even if it is by the same individual.
21 The buyer conversion rate is the number of buyers as a percentage of the unique visitors.
<table>
<thead>
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<th>Virtual Only Retailers</th>
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**Figure 29: Comparison of virtual channel between multi-channel retailers and online retailers (BCG, 1998).**

The revenues are highly concentrated. The 10 largest sites account for 50% of the revenues and the top three sites in each category account for more than 50% of volume. There is a race among Internet organizations to claim a leading position in their respective industries.

The booked revenues of online retail amounting to $4380 millions can be divided to five categories: Transactional revenue ($2,660 millions), sales of merchandise and services directly to end customer. The cost of goods is included. Broker/agency revenue ($1,510 millions), i.e. indirect sales of goods and services when retailer act as an agency, e.g. travel agent. Advertising/marketing revenue ($100 millions), fees from advertising and marketing. Customer membership fees ($70 millions), customer fees for access to site privileges, whether merchandise or service related. Offline referral fees
($40 millions), fees or commission derived from referrals to offline retailers. Though the direct transactional revenues account for 61%, the supplemental revenues are growing fast and have high margins. These add to the profitability potential and make the investment calculation for entering the online market more complex. (BCG, 1998) Paul Otteli senior vice president at Intel was surprised at the success of its e-commerce operations. They can easily exceed $2.5 billion in sales per quarter. Other often mentioned companies are Dell with its $300 million per month in sales and Cisco with $400 million per month. (Foremski, 1999)

The benefits outlined by Applegate (1999) are supported by a survey on EDI use. Experiences can be drawn from EDI since it is another form of electronic commerce that could be comparable with an investment in Internet as a sales channel at lest to some extent. The study in which 100 European organizations that were about to introduce EDI ranked six positive effects with the EDI usage. The most important one was less paper use, followed by better inventory management, cost reduction, better competitiveness, increased customer service, and more efficient information flow. The first three are more quantifiable, while the last three are more abstract and not as easy to measure. After one year, the same organizations were approached with the same question. Now, after the implementation of EDI they ranked the six alternatives with the abstract effects as most important and “more efficient information flow” as a clear number one. Note that the opposite ranking was not a result of diminishing importance of the concrete effects but a better appreciation of the abstract ones. (Fredholm, 1997)

Improved communication and enhanced customer service were mentioned as payoffs from their Internet investments by most of the 525 CEO’s and senior executives at the larger companies in the world, this supports the EDI study. Due to wide impact of Internet the payoffs came in many shapes, see figure 30. (Callahan, 1999)
5.5 Network Economics

Since there are many authors discussing the new economy, we have asked the respondents if they are aware of and are thinking in these terms when they conduct business. There was confusion when the questions were asked and they needed to be rephrased and asked again before the respondents understood it. When they understood they replied similarly.

23. Do the individual flyer/buyer contribute to the value of the other flyers/buyers?

The active use of this mechanism was not developed in Sweden or in the US:

“I am not in favor of community building, I prefer personalization. Internet Manager, 6E.

Those who did not simply just reply with a “no” said:

“This is an interesting question. We do not do it like that and will not for another 12 months.” Internet Manager, 1U.

“Not on an individual level, but the site is developed using feedback from the users as a group.” Liaison Manager, 4U.
24. **Do you offer other products/services in addition to your core offer?**

To classify the strategic choice made in order to gain customer ownership the offering of products becomes important. The width of products offering can be divided in to three levels. The first one is if the cars, hotels and flight tickets are provided by the airline on their site:

**Sweden**

“[The airline] do not offer booking of cars and hotels. Some customers want to be able to book it all, but the new channel is meant for simple trips.” Account Manager, 3E

“As long as it is flights [the airline] will take care of it, not any hotels, cars or boats.” Distribution Manager, 5E

“I think there is a need for a good tool to bundle hotel and travel, hotels that we can recommend, to the leisure market.” Internet Manager, 6E

**USA**

“Today, hotels and car rentals are not offered on the site. Sometimes they are included in our special offers that are sent out to the customer.” Internet Manager, 2U.

“Yes, we do car and hotel, and in the future we will do destination information.” Internet Manager, 1U

The second and wider product offering is when the airlines also offer services like travel insurance, visa and passport services, affinity credit cards, travel related medical support:

**Sweden**

“I believe in travel insurance. I could see ourselves offering supplemental products through partnering and collaboration, but not just by putting up links on our site to them. The visitor should not have to leave our site in that case. Other examples could be maps to the hotels and booking of taxis.” Internet Manager, 6E.
“Functionality that will be able on the Internet are bookings, buying other things associated with airlines, e.g. pins, and a lot of information on travel destinations.” Distribution Manager, 1E.

The product offering can also be made deeper by incorporating competing airlines’ flights and offer them simultaneously as their own flights. When several carriers’ flights are provided it opens up for facilitating the purchasing process and its gathering and evaluating information:

Sweden

“Why not let people book other airline tickets at our site? Why not let them keep a relation to us? If you go to a nice cloths store and ask: ‘Do you have this and that?’ ‘No, but you can go to our competitor because they also have nice apparels.’ I always get a feeling of credibility in that kind of act.” Internet Manager, 6E.

USA

“Decisions rules are some what used already. If you go to a Web site you can look at information unfiltered, or if you like flights from a few carriers. This is similar to what the travel agent can do. This trend will prosper more in the future, the whole nature of the Web is that almost everything is possible.” Internet Manager, 1U.

5.6 General Advice

25. Can you give a general advice to someone introducing an Internet sales channel?

There are many processes in an organization that are taken for granted. In addition to looking at best practice of other companies Internet efforts, managers should also look internally for experience. It is important to get feedback from and learn from people in the old channel. Once the organization has established an Internet site they should communicate internally to the other members of the organization and explain the purpose of it. This is important since their support is needed and they might fear to be eliminated by the new technology.
“Ask a question: ‘how effectively can I replicate the service the intermediary is providing? The distributions expertise and customer relation expertise at a reasonable cost?’ Then it makes sense to go full force in trying directly supply the customer. If you plan to replicate the functionalities of the intermediaries, most will find that it is more expensive than they thought. It takes a significant amount of investment. The logistics is an area where surprise costs can occur.” Internet Manager, 2U.

26. What do you think of Internet and the use in the future?
This question was asked to see if the respondents had a idea of a future scenario. The common view was very positive and they showed high expectations:

“Internet and the future are tremendous, the airlines will grow but the travel agents will not disappear.” Internet Manager, 5U.

“We are extremely exited about what the Internet will offer in the future. As a company, we put a lot of resources to it. It is just the tip of the iceberg we have seen.” Internet Manager, 1U.

“In the future you can push a button and talk to a person that see the same page as you do. A better mechanism for identifying information that is needed will be at hand. The system should be able to customize to the individual and present the information that individual need during the whole process. That means taking away more of the professionalism that the travel agents have offered in his service. The customer will be more in control in the future.” Liaison Manager, 4U.
6 Analysis

In this section, we analyze the empirical data with help of the theories and models from the frame of reference. We also use some new reference material not previously presented in the frame of reference that we have found a need for after the analysis commenced. The design of this chapter follows the other chapters. We begin to analyze the decision situation and continue with the importance of relationships in the two channels. The third theme analyzed is the added value in the different channels and it will be followed by the fourth theme, the financials. Lastly, the new economy will be analyzed.

6.1 The Decision Situation

As mentioned before our report is organized around four themes. The first theme is a decision situation an organization is facing due to changes in the environment that results in a decision process. First, we outline the changes that have occurred in the airline industry that started with the deregulation in the US in 1978 (Sarathy & Ramamurti, 1997), and in Europe in 1992 (Bouvard & Somosi, 1997).

The airline industry used to act in a protected environment. This meant that the incentive for cost control was low since they were able to compensate with higher ticket prices. (Bouvard & Somosi, 1997) The deregulation opened up the market for competitors which resulted in price cuts on the tickets. The airline industry can be said to be close to perfect competition and therefore each airline is a price taker; no airline can set the price on the market, instead it has to accept the existing price. The revenues were surpressed and the only way to increase the net profit was to cut the costs. New technology such as Internet made it possible to lower the distribution costs, which was significant being the third largest cost. See figure 31.

![Figure 31: A long-term perspective of changes in the airline industries both in the US and Europe. (Own development)](chart)

|------------------|------------------------|----------------|----------------|-----------------|

(Own development)
6.1.1 Change

In today’s global environment, changes are the only constant and you have to know your customers needs and desires to stay in business (Brown & Eisenhardt (1998). The emergence of Internet has made all of us more aware of and curious about what you can do with this new medium. Consequently, people demand the airlines to make it easier for them to book tickets and one of the airlines’ responses was Internet. As mentioned, another factor important to consider is also the fact that airlines need to lower their costs constantly. They experience low margins and since the deregulation they found themselves in a very competitive world with low ticket prices (ATA, 1999). Both external and internal factors led to this situation. The external factor was the increased competition due to the deregulation, the internal factor was the high cost levels. In the new marketspace (Rayport & Sviokla, 1994) transaction costs are lowered and allow for convenience and ubiquity. Our findings are similar to earlier research (Fredholm, 1997) in that the driving forces in the beginning was primarily cost reduction and secondary increased competitiveness. Later the more efficient information flow and improved customer relations were more appreciated. But, cost reduction is still regarded most important:

"It is a survival strategy. There is competition on all destinations... This brings the need to lower the costs.” Account Manager, 2E.

All respondents agreed that the change, the introduction of Internet in the travel industry implies, was revolutionary. When the decision first was made it was a difference between Europe and the US regarding the level of reaction versus proaction. The Swedish respondents showed more of a reaction. Some of the US airlines also had signs of a reactional response, but the overall picture is that they were much more proactive. Today, when all the airlines have their sales enabled sites, they all claim to be proactive. In figure 13 (Hellgren & Melin, 1991) the US airlines are located in quadrant 1 – they were proactive to the revolutionary change, while the European airlines are in quadrant 2 – they responded more reactive to Internet. The fact that the US airlines all thought their site was the best in the industry support their self-image of proactiveness. It is not unusual for a respondent representing an organization to laud his or her own activities and position. One possibility, provided that they did have an honest opinion about their superiority, is that it is possible to differentiate an Internet site. This differentiation would mean different business strategies and prioritizing customers needs and wishes in other orders. In that case, the different objectives and goals the strategies imply, opens up for each one of the sites to be “best” in the industry from that perspective.
The change has some major issues that are hindering the adoption of Internet. The impact of them could be a reason for why the European airlines have been more reactive. For instance, they considered the security issues to be more important, at least for the customers in their market. The uncertainty avoidance is actually lower in Sweden than the US (Hofstedt, 1980). This implies that the concern has more to do with the behavior change which is more extensive in Sweden. People in the US have a long experience of trusting somebody with their credit card, e.g. by giving out the credit card number to a sales representative over the telephone.

### 6.1.2 Decision process

Our findings support the suggestions by Ghosh (1998), that the character of Internet in being a new phenomenon increased the uncertainty in the decision making. In addition, the amount involved in the investment has been significantly large. Because of these reasons, the decision has involved the top management. The nature of an IT investment is complex that requires deep knowledge about both the technical aspects and the impacts to the business. Those in top management positions that neglect the Internet have known to face personal consequences:

> “A driving force for upper management could be the risk of being seen as not doing their job if they do not use Internet. Some have lost their jobs because of it. [But not in the respondent’s organization].”

*Internet Manager, 3U.*

One example of the above statement is the firing of Eckhard Pheiffer, the CEO of Compaq, because he did not act fast enough to align Compaq with the Internet business (Sandén, 1999). Spar & Bussgang (1996) have brought forward that organizations are experiencing frustration, confusion, and unprofitable Internet sites. To handle these problems it is necessary to have the support and understanding from the top management, as the respondents in our research emphasized.

According to Lekwall and Wahlbin (1993), a step by step decision analysis is to favor when managers are about to make a major decision, e.g. using Internet as a new sales channel. This rational behavior was not observed or mentioned by the respondents. Instead, a business case was often put together in order to get an understanding of the issues involved. There was no place for a time consuming analysis since the fast pace of Internet’s evolution.
The logic of the rational decision model according to Lekwall and Wahlbin (1993) is that a large and uncertain decision should be dealt with using increased amount of information and analysis. However, Brunsson (1982) point out that large changes need motivation and commitment to achieve the necessary action. But, a rational analysis works against these needs, instead an action rational approach is favorable. In this context, the balance between decision rationality and action rationality is put on its edge. While the extensive uncertainty and large investment amounts suggest a decision rational approach, the needed speed calls for action rationality. Our perception of the decision processes is that the European airlines’ decision-makers have leaned towards the decision rational approach and the US towards more action rationality. Hellgren and Melin (1991) argue that organizations in figure 13 quadrant 1, do not experience any major problems despite the change. Our judgement is, as we mentioned earlier (6.1.1), that the European airlines were more reactive, and hence in quadrant 2. Organizations in this quadrant typically experience crises resulting in major changes in their strategy. We suggest that this crisis could in the case of the European airlines be the need of forming new ideologies. Brunsson (1982) argue that rational decision making is appropriate in forming new ideologies. A more rational approach was also noticed among the European airlines. This rational approach was not as present in the US airlines, an explanation could be that their ideologies already was suitable as decision rules about using Internet as a new sales channel. Since the ideologies did not need to be changed, US airlines could instead focus on action. The differences in ideologies are understandable from the perspective of the deregulation. The US deregulation occurred in 1978, giving the airlines plenty of time to develop new ideologies suitable for the Internet context. The needed change of ideologies might not have take place as Internet was forced upon the European airlines, the deregulation in 1992 happened almost in the same time as the commercialization of Internet. Brunsson (1982) say that the ideological shifts are slow to take place, and this could explain the time lags between an organization’s response and environmental threats, making this an reasonable explanation.

Though, a map of the unbroken land is emerging for the US airlines, after one to two years of the on-line sales channel introduction, the organizations feel that they can have a more systematic approach nowadays. Historical data for analysis are available, knowledge and experience are built up within the organizations, and instruments for assessing the customers needs quickly enough are available. Hence, a more decision rational mode is evolving. Nevertheless, it is not lowering the speed of action. As the European airlines have their new ideologies
in place they will, according to our thoughts, move more towards action, see figure 32.

![Decision Matrix](image)

**Figure 32:** A matrix showing the decision making regarding the Internet sales channel for the European and US airlines, with their present change in decision mode. (Own development of Brunsson, 1982)

### 6.2 Relationships in the distribution channels

The underlying reason for airlines to use travel agents was economic factors since leisure trips was expensive to handle. When the travel agents later took care of the business trips it turned out to be an expensive distribution channel for the airlines. Other factors why airlines use travel agents (Kotler, 1997) are their ability to offer more products than just flight tickets, e.g. hotels, cars, and trains etc. Further, they have a long experience to handle leisure and business trips as well as they have the customer contacts. They act as a third party and give the customers benefits such as added value, by offering customers collection, collation, interpretation, and dissemination of vast amounts of information (Quelch & Klein, 1996, Alba et. al, 1997). They also act as the airlines’ channel to their market since it is an efficient way to reach customers, especially for a domestic airline not having an extended network in other countries. Today, approximately 80% of the tickets sold are still through travel agents in both Europe and the US. Some traditional travel agents in the US say though they have lost 10% to 20% of their business during the past years as customers switched to on-line ticket purchasing. (Taylor, 1998). This figure is probably not representative for all travel agents, rather it could reflect those finding it hard to adapt. In general, airlines are dependent on the travel agents, and have been for a long time, a relationship that seems hard to brake since customers continue to favor them. But, in the future, the travel agents will probably see some pressures in form of less sales because of Internet.
Since the 1950s, the travel agents have built up personal relations with the end users and have the advantage of knowing the customers. Many airline respondents emphasized that travel agents have incredible knowledge about their customers, they almost have monopoly on the relationship. The airlines responded with the implementation of first, the frequent flyer program, and now the Internet. The negative side for the airlines is that the frequent flyer programs only create a relationship with those that the airlines traditionally have had a relationship with and met in the seats of their planes. In favor of the travel agents is that they also have knowledge about the buyer, which could be the organization the person is employed by and not the flyer.

“[The airline] do not choose to ignore the travel agents because they are the one who have the flyer/buyer in their hands.” Distribution Manager, 5E.

For many years, the airlines have had a strategy towards the travel agents similar to what Siguaw et. al (1998) is talking about, a market orientation strategy. They have worked together towards a common goal and shared information about the industry and the customers, which in turn created trust and credibility between them two, see figure 15. This still holds true when it comes to foreign airlines in a national market, it is the local carrier that mostly has experienced the conflicts. The travel agents are in a special situation since they are agents and not traditional distributors, and are forced to follow the airlines’ prices and rules. This means that they normally offer all the world’s airlines to their customers together with hotels, cars etc. It is then important for the airlines to have a fruitful relationship with the travel agents as they recommend an airline to its customers, since the airline is one among many offered by the travel agents. If the travel agent feels comfortable and trusts the airline, it is likely to be favored. In accordance to this, the airlines pay “overrides” and bonuses to those travel agents that sell more than they did the previous year. (Bouvard & Somosi, 1997) This is an inducement for the travel agents to both favor a specific airline at the same time they receive more revenue.

In Europe, the local carriers still have a dominant position in their local market. This has also given them the advantage to control the rules in the industry, which was supported by the interviews we conducted:
“The national carrier has the advantage to decide the rules in the market. They were the first to lower the commission to the travel agencies. As much about half of our flight tickets sales are with the national carrier, which means that we have a strong dependence on the national carrier. Travel Agency Representative, 8E.

Before Internet was introduced, the airlines lowered their commission to the travel agents. This first happened in US and later in Europe. The airlines had pressure to reduce their costs since they are operating in a mature industry with low margins (ATA, 1999). In this competitive market, the airlines cannot afford to pay full commission and still be at the mercy to the travel agents. The reason for lowering the commission was that they regarded the travel agents work with advises, booking, ticketing flights, hotels, cars etc. as a cost they were not prepared to pay for. They are only prepared to pay for booking and ticketing flight tickets. The local carrier in Sweden has also undercut the travel agents. If a business customer books his/her ticket through their direct channels such as Internet, he/she will be offered a price 4% lower than the travel agent can give. So far, this concern only e-tickets to some specific destinations. This together with the lower commission and the implementation of Internet made the travel agents loose their trust and commitment towards the local carrier. A conflict started and our findings showed that the travel agents were not happy about the situation and they now have a policy regarding what airlines to favor when their customers book their tickets. This is also supported by an article in Dagens Industri (Bark, 1999a), the travel agents directed their ticket sales to other airlines since SAS acted without consideration of their partners and “shot themselves in the foot”. Since the local carrier has lowered its commission, domestic airlines have followed, but not to the same extent. Their response to this was: Why should we pay high commission when the local carrier does not? But, they strongly argued that they never undercut the travel agents and by doing so they have not experienced any conflicts. The conclusion of above is that as long as the local carrier has its dominant position and decides the rules in the industry, the travel agents are trapped.

“It is easy to lower the commission as a national carrier, it has been in other countries too, they are the once who have driven the cuts. We are just following, but not lowering the commission to the same extent. This means that we will not have the conflict the national carrier is experiencing.” Airline Representative.

When Internet was implemented, the airlines knew they risked damaging their relationships with the travel agents, relationships that have been carefully built
up over decades. (Ghosh, 1998) But, there was little choice, they needed to cut their costs, and the third largest cost is the distribution of tickets (Bouvard & Somosi (1997). The airlines we interviewed argued that this was the most important driving force for implementing Internet as a new sales channel. The travel agents’ first reaction was that the airlines “stole” their customers since they have had the personal relationships with the customers. There were travel agents worrying about loosing their jobs, but most of them understood it was the way of the future. But, the respondents at the travel agents thought this could have been dealt with more thoughtfully. The airlines put their own needs and goals in the first room instead of the distributors and created a conflict instead of continuing the fruitful cooperative relationship they had from the beginning (Siguaw et. al, 1998). Still, our findings were the same in Europe and the US, the travel agents are still important partners and the airlines do not plan to cut them out. One airline mentioned they appreciated the help the travel agents provided but they are able to do what ever they want. This may be right since the airline own their products but, this do not create mutual trustworthiness and cooperation (Zineldin, 1997). To the benefit of the travel agents is that the transformation from one channel to another will not happen over night. According to all airline representatives, the travel agents have realized that Internet is a reality they cannot ignore. Other industries have experienced this as well, an example is Intel who is a strong supporter of e-commerce. In the beginning there was a fear of Intel bypassing the distributors but so far there has been little conflict. (Formemski, 1999)

Since the deregulation, the travel agents realized their role would have to change (Bouvard & Somosi, 1997). They did not know that the Internet would emerge with such a pace and the risk to be bypassed. This has shaken the travel agent community as well as other industries. To protect their position the travel agents have to change their strategies if they want to find a fruitful position in the future. Their new strategic initiatives have been e.g. to develop of their own Internet on-line sales and offer more consultant services. They have also started to charge their customers a booking fee at the same time they are giving back the commission they get from the airlines (Bark, 1999a). This is a way to show their independence and their customer orientation. This is supported by the airlines, they believe the travel agents have to differentiate themselves otherwise they will be put out of business.

In the end, it is the customers who choose where he/she will book his/her travel arrangements, direct to the airline or indirect through a travel agent. Either way, it will depend on, among other things, how the purchasing process can be
conducted in the most favorable way to the customer (Alba et. al, 1997). Some customers want to have a third party booking their trips, whereas others want to have control and book their trips by themselves. The development and emergence of Internet as a new sales channel will depend on what the customers desire and which Internet sales format that will be preferred. All airline respondents supported this, they emphasized that it is the customer who will have the power in the future. He/she is the one who decides which channel he/she will use when buying a trip:

“The customers will have the power in the future. It costs [the airline] several millions to create new channels and it is done because we believe that is what the customer wants.” Account Manager, 2E.

6.2.1 Relationships to the flyer/buyer

Other authors (Gummesson, 1995, Zineldin, 1998) support our findings, customers become loyal if the organization can provide benefits others cannot do. That is to say, if an organization is able to continue provide benefits, a long-term relation will be in place. It is critical to develop and maintain a relationship to reach successful exchanges. The airlines have described security, timetable, destinations, price, and services to be the most important benefits. The local carrier has even in this case an advantage since its hub is located in the country. Therefore they have more destinations, a better timetable and, ground services. The frequent flyer program is mentioned by several respondents as an instrument to create loyal customers, maybe the best way. However, some were more negative and said it is very hard to create loyal customers, in 99 of 100 cases the destination and frequency mattered the most. Even in this case it shows the benefit of being a local carrier as they have more of these choices to offer.

When it comes to choosing airline the travel agent can always try to lead the way, show the benefits of using one airline instead of the other. One problem they face though is the airlines frequent flyer program, customers often choose the airline where they can collect points. This is supported by the article in Dagens Industri (Bark, 1999a), the customers often stay with his chosen favorable frequent flyer program because of the personal benefits. Customers/travelers often sign for a frequent flyer program with its local carrier since they have a dominant position which mean many destination, frequent take-off and easy access to local ground service.
6.3 Added value

In the analysis of the value added follows the four concepts that were outlined in the summery of added value theme in the reference chapter. In order to analyze the added value we have used open sources like several web pages and literature in addition to the interviews. Those organizations that are mentioned by name are not necessarily part of our sample or interviewed. These are only mentioned since they serve as good examples of alternative strategies. None of the example organizations have yet reached the state outlined in the frame of reference for each strategy, but there is a movement towards it.

6.3.1 Learning Relationship

A supplier as an airline, has a high level of ownership of the product that they are offering the customers. Most airlines of today only offer their own product, they function similar to a target relationships since they market themselves to segments of customers, see figure 33 quadrant 1. There is an awareness and possible movement among the airlines in this research towards a learning relationship, where the product is customized to the individual needs.

“Yes, we have one-to-one marketing on the Internet. We get a lot of information based on what they tell us and based on their behavior. So, we are able to accurately market to those customers.” Internet Manager, 3U.

“Personalization is an important development, that is possible with Internet.” Internet Manager, 2U.

An example of an organization pursuing the learning relationship strategy is American Airlines, see figure 33 quadrant 2, who only offer their own tickets on the web site. They still have a long way left to become an organization utilizing the learning relationship concept in full. Nevertheless, they are considered to have come the furthest in personalization (Seybold, 1998).

6.3.2 Vertical facilitators

The second possible strategy in gaining customer ownership is “vertical facilitator”. Those airlines also offer tickets on flights that they do not have ownership of, e.g. United Airlines and Lufthansa\(^\text{22}\). These airlines are the closest

\(^{22}\) http://www.ual.com and http://www.lufthansa.com
of being vertical facilitators, see figure 33 quadrant 3. The facilitating is within the airline industry and not involving others such as e.g. insurance or luggage. The search and evaluation process can still be developed further to be more personalized. The vertical facilitating relationship should have most value to the customer when he is about to buy a complex trip, but these are still handled by the traditional offline travel agent:

“When it comes to the complex trips, the travel agents are better at the search process.” Distribution Manager, 4E.

6.3.3 Meta Intermediaries

The travel agents hold the lowest level of product ownership since they only mediate the product. The travel agents have traditionally had higher level of customer ownership than the airlines. The travel agents are now moving towards an even higher level of customer ownership, as do the airlines. The traditional travel agents are so far best described as brokers as they offer airline tickets, hotels, cars, and insurance. They cannot be called vertical facilitators or meta intermediaries since the travel agents works as an interface (but, the travel agents work as facilitators in some sense), see figure 33 quadrant 4.

“Travel” is well suited to be treated as a meta market, most of the prerequisites are fulfilled [4.3.4]: The number of activities related to travel are plenty, they have a high economical impact all together (depending on the type of trip and customer it could require an extensive search, see [4.3.2 & 5.3], several sources of information and product providers are needed to travel, and the middlemen add substantial costs [5.4]. There are examples of Internet based travel agents that are approaching the meta facilitator mode. The Microsoft owned Expedia Travel\(^{23}\) has started to offer products from other industries; maps (geographical guide publications) alarm clock/radio (consumer electronics industry), suitcases (luggage industry). Its main competitor, Travelocity, has started a similar quest and offers e.g. travel books (book retailing), and weather reports (news/media industry). Both of these sites have integrated these services to a varying degree, even credit cards are offered through banner advertising by the issuers and represent the loosest coupling, see figure 33 quadrant 3. Laudon & Laudon (1996) support this; travel agents on the Internet offer products/services that cannot be found at traditional travel agents. One airline made a statement indicating a possible move to become a meta intermediary:

\(^{23}\) http://www.expedia.com and http://www.travelocity.com
“I believe in travel insurance. I could see ourselves offering supplemental products...” “Why not let people book other airline tickets at our site?” Internet Manager, 6E.

Figure 33: The GR product/customer ownership matrix with some of the travel industry’s actors mapped in. Neither of them has actually reached the stage they are positioned in here, but they are moving in that direction. (Own development)

These different sales formats are different in their ability to support the purchasing process (see 4.3.1). At present, the traditional travel agents have a medium number of categories with a high number of alternatives in each category. In contrast, the vertical facilitator has a low number of categories (flights only), but as many alternatives within the category as the travel agent. The travel agents are better at selecting a consideration set based on their knowledge of the customer compared to the vertical facilitator (as represented by United Airlines). The information provided by the travel agents about the alternatives in the consideration set is high on quantity and quality, the possibility for side by side comparisons is high. The vertical facilitator provides a medium quantity of information. The quality is depending on if the information is regarding the own product or a competing airline’s. The side by side comparison is possible, but limited to a smaller amount of the attributes (departure time, duration of flights, price etc). See figure 34.
### Figure 34: Evaluation of different sales formats’ present abilities to support the purchasing process (Own development using Alba et. al, 1997).

#### 6.4 Financials

Financials is the last theme that will be analyzed. The traditional investment perspective is first discussed and then the expanded one.

#### 6.4.1 Initial Investment

It has been difficult to get a good answer on the cost of web sites. Some web consultants are known to give a wide range of price quotes for the same project (Vikström, 1999). A speculative explanation could be that the Internet consultants have been developed from different origins. Management consultancies – once accounting firms, advertising bureaus, and computer programming companies are all evolving to the electronic commerce area and moving towards each other competency wise. The consultants also show a wide range of the level of sophistication in regards to their understanding on electronic commerce. Furthermore, some of the Internet consultants are newly established and need reference customers, the offered price might not mirror their own costs for the project in that case.
However there are some consistency between the answers the respondents gave and the publicly available sources. Icon (1998) suggested $1.2 million and Gartner Group (1999) $1 million for a sales enabled site with interactive features. This is the kind of site that the airlines studied are using. The figures given from other sources are not precise about the level of sophistication and are therefore note taken into account in the analysis. The lower-end for the airlines initial investment is about the $1 million level mentioned in the secondary sources as average. A reason for the airline industry’s sites to be more expensive could be that it is information intense (Porter, 1998). This implies that the airline industry is more complex in information handling than the average industry, and requires a more costly Internet solution with more back-end interlinkages. The back-end is also what often causes increased costs in the development of sites (Gartner Group, 1999)

6.4.2 Reoccurring Costs

The only figure on maintenance costs found is $100,000 per year for a “major” site (Shillingford, 1999). An estimate of the costs for upkeeping of the site in the airline industry is $250,000 to $300,000. Again, the cost in the airline industry is higher than the average. There is much data that need to change continuously, e.g. the promotions the airlines frequently use to maximize the load factor. The fact that the airline industry is information intense (Porter, 1998) could also contribute to the reoccurring costs.

Transaction costs over Internet for the airlines are in the range of $5 to $12 according to one respondent. Using $6 that also has been mentioned the savings on transaction costs using the Internet channel could be as high as 80%, ($35 versus $6) compared to the traditional sales channel with travel agents. Cutting out the travel agents brought a major part of those cost savings. Our finding is supported by another study, which estimated that it is possible to save 75% by switching channels (Andersen Consulting, b).

6.4.3 Revenues

Although the airlines know that their customers are concerned with security issues and the other general barriers for Internet adoption is present in the industry, they still have managed to create sales. The Internet sales in Europe are modest, less or much less than 1% of total sales. Like what could be expected, the sales in the US were higher. Revenues of about half a billion dollars annually per airline, or 2-3.5% of total sales, are achieved. The answers the
respondent gave showed that the revenues were often underestimated in projections. From how they described the sales increase, a speculation could be that at present time the sales are increasing in a non-linear way and that the projections were more unpretentious. Some authors mean that the number of users adopting Internet are increasing polynomically for the moment, but can be expected to slow down in growth pace in the future, all according to an S-shaped curve (Shapiro & Varian, 1998). The general adoption of Internet could reasonably be thought to mirror the development of the sales of an individual site.

The theories (see 4.3.3) implied that the price could actually be higher if the Internet channel better supported the purchasing process. We have not yet seen a price premium charged in the airline industry’s Internet sites. Rather, if the price was different it was lower, and not higher, than in the travel agent sales channel. In most cases the price was still the same in both channels. The lower prices that exist in the Internet channel are more sales promotion than a general low pricing strategy. E.g. incentives to use the channel during a campaign week or a “sale” of empty seats in a flight soon to departure.

6.4.4 Profits

Applegate’s (1999) notion that IT should be thought of as a string of investments has been verified by the respondents’ opinions and also their answers on how they act. All the airlines had made either larger revamps or constant improvements to functionality’s that required repeated additional use financial resources. The awareness of the needed continuous investments is what justifies poring more money into a loss-making venture. Just like other organizations such as Amazon.com would show a profit if they step down the marketing investments (BCG, 1998), so could the airlines’ Internet investments:

“If you ever slow down development and you are not spending as much, then you start to theoretically be profitable. But, then you are behind in some type of development. So, we are continuously putting more resources into developing new functionality’s...” Internet Manager, 2U.

A survey (Gartner Group, 1999) showed that all companies in the survey had experienced development costs that were exceeding budget. This was supported by some of the airlines in the US who said that the development costs could surprise many not previously involved in the area. In terms of revenues, several of the US airlines said that their objectives had been met or even turned out
better than expected. These two findings suggest that the Internet investment is a bigger issue than anticipated, both the costs as well as the revenues are higher than predicted. Since it is a bigger issue, it becomes something involving management higher up in the hierarchy at the company. The respondents in our interviews also said that the support, understanding and involvement from top management were of outmost importance to the Internet business.

6.4.5 Expanded Investment Calculation

Many of the payoffs mentioned in other studies (Fredholm, 1997; Callahan, 1999) are also present in the airlines’ businesses: More efficient information flow, improved communication, enhanced customer service, reduce costs, create new products and services, reduce time to market, and increase revenues.

These could also be categorized using Applegate’s (1999) description:

The “options value” (category 1) improvements are what have been analyzed above – cutting the transaction costs. It seems that this has given more than satisfactory results. In “platform improvements” (category 2) there are a number of aspects that have contributed to the value of the investment. With Internet, it has been possible to introduce new products like electronic tickets at a lower cost. The internal reservations system is a legacy system that has gained increased lifetime by having an up to date interface, the Internet site, to reach the customers. This also means that the reach of the IT platform is expanded. “Commerce” (category 3) improvements include creating a new channel to the customers, some corporate customers even have travel sites in their intranet. Operations have also been streamlined since the web site has alleviated some of the workload from the call centers concerning routine questions. One should not forget that an Internet site also requires support functions. “Content” (category 4) has meant that the airlines are gaining more information on their customers as they are getting closer to them. Moreover, this brings more information to base its decisions on. E.g. the frequent flyer program is improved with the Internet site and this is a good source for some of the decision making like route planning. Moreover, the sale of tickets as the date for the flight is approaching is made possible with Internet and is an example where action is made more efficient. “Community” (category 5) is yet to be launched, this is an undeveloped value of the Internet sites.
It is evident that there are many benefits that not should be forgotten that already has meant improvements to the airlines. There are still many business opportunities, “IT-options,” that can bring value to the airlines in the future.

6.5 Network Economics

At present time, the number of flyers does not directly affect the value of the product the airlines are offering. It could be argued that an increased amount of flyers in the long-run leads to advantages since a popular airline is able to open more routes. With more routes, the size of the network of destinations is increased and being a loyal customer to a larger network is worth more. (E.g. bonus mileage can be gathered and redeemed on more flights). When it comes to the differences in the sales channel, which is in focus in this report, the network effects are not used deliberately. Those airlines that have feedback on the functionality of the web site might benefit from more users of the site and be better positioned to respond by improving the functionality. The perceived value of the web site to the individual would thus increase with the number of other users. One respondent mentioned this. There is no clear evidence of any more direct and obvious positive feedback loops in the sales channels.

6.5.1 Tipping and Lock-In

Many of the airlines are aware of the need to move fast in the development of their web sites. However, our impression is that this awareness is related to a general apprehension of first mover advantage, not network effects. Neither tipping (Arthur, 1989), lock-in (Shapiro & Varian, 1998), or Metcalf’s law (Kelly, 1998; Shapiro & Varian, 1998) are used as arguments for the quest to grow. Are these mechanisms present in regards to the travel industry’s web sites? If the travel industry’s sites would develop to fully embrace the concepts outlined in the added value theme in this report (learning relationship, vertical facilitator, or meta intermediary) a customer ownership would be established with lock-ins. It would be difficult to make customers switch into a new relationship because it would require building up the search agent function again (background variables, preferences, evaluation rules etc). Furthermore, if this agent function has algorithms that use information from other buyers to evaluate which product to offer the buyer at hand a feedback is present. This could lead to tipping if the value the other buyers imply reach significant level. Perhaps the alternatives that involve more than the own flights in the gathering and evaluation during the purchasing process (vertical facilitator and meta intermediary) have an advantage in creating a lock-in. We think this might be the case in the airline industry since it is hard to differentiate the flight product.
Unless the whole travel process is reinvented to create some differentiation, the “learning relationship” path allows for few benefits in terms of increased utility to the customer. The low utility means low lock-in and little positive feedback loops. Metcalf’s law would in other words be stronger in the two alternatives with lower product ownership; vertical facilitator and meta intermediary.

6.5.2 Information Contagion and Community

As explained in the frame of reference, the information contagion (Arthur & Land, 1994) is about other buyers who are senders of information, in the other concepts the seller has been the sender. None of the airlines, European or US, said they actively tried to support information contagion on their website. Neither did they use community building. But, since they all have a large database with frequent flyers an introduction of this feature could easily be made. It is not possible to say if there is a trend in the industry towards using these mechanisms:

“I am not in favor of community building, I prefer personalization.”
Internet Manager, 6E.

“We do not do it like that and will not for another 12 months.”
Internet Manager, 4U.

People that do extensive search (Wells & Prensky, 1996) before they decide what to buy, e.g. because earlier experience with the product is low, would gain from a feature that enabled them to obtain information on the product from other past buyers. Especially those who are afraid of flying and have a high perceived risk with the product “flying” would probably appreciate such possibility. Our conclusion is that information contagion have potential in the airline industry and would fill important gaps in the evaluation of the product before its use since it can be classified as an experience good (Alba et al, 1997). Supporting information contagion does not contradict perusing any of the three strategies presented to get customer ownership (learning relationship, vertical facilitator, and meta intermediary). Rather, it can be implemented in parallel and serve as a compliment to any of these. Information contagion can be leveraged by e.g. a producer by sponsoring community building (Armstrong, 1996), this would be an additional dimension for gaining customer ownership. In order to somewhat control which information that is distributed, the community could be open for members of the airline’s frequent flyer program. That would increase the probability that the participants can provide each other with company specific
information. But, this leaves one problem to be solved. How should new buyers who are inexperienced with the product and therefore not members of the frequent flyer program be incorporated in the information distribution? Perhaps by lowering the entry barrier to the frequent flyer program and inventing some mechanism that foster loyalty to the airline beside of the mileage points. Since the inexperienced users obviously have limited flying history, loyalty has to be created in another way. We believe the loyalty is one way of getting a favorable treatment in the information feedback. If the information gained from the community has a high value to the individual, this is maybe all that is needed to create loyalty. Examples of communities in other industries worth noting are “garden.com” and “bride.com”.

7 Conclusions and Recommendations

This final chapter brings together the findings into a conclusion. Our four themes discussed, first within the airlines industry, and then the managerial implications will be brought forward. Further, some theoretical reflections of ours will be presented.

7.1 Findings in the Airline Industry

Our opinion is that almost all organizations need to embrace Internet in some form. There are organizations that because of their size or kind of business have little to gain from Internet. But, we think large organizations need to be on the Internet since they often show complex information flows both internally and externally. A question that could be discussed to a greater extent by managers is, whether or not to sell over the Internet. This has been the overall question in this report. Our conclusive answer to this is in short: Yes!

7.1.1 The Decision Situation

Internet is mutually seen as a revolution to the travel industry. A paradox is that the decision in the US airline industry regarding the Internet sales channel was not well analyzed, rather it was made fast in order to prioritize action. The main reason was to be proactive and not let competitors leapfrog their position. The European airlines in our study did not show the same emphasize on action. They required more analysis before the decision, possibly in order to change their ideologies first. Though, a common denominator for all the airlines was the necessity to cut costs and Internet was seen as a mean to achieve this. A secondary reason for the implementation of Internet was the wish to get closer to the customers. Notably, the revenue potential was not a major consideration by any airline. The customers have also demanded convenient channels in which they can be in control. This leaves the airlines with no choice and the introduction of an Internet sales channel is inevitable.

The Internet Managers have emphasized the importance to have upper management awareness, understanding, and support during the launch and during the continuous work. The Internet channel needs constant supply of financial resources since new features are required to stay competitive and not suffer from having the customers locked in by other organizations.
7.1.2 Relationships in the Distribution Channels
The shift from the traditional distribution channel to the Internet channel is not as significant as the shift within the airlines own direct sales channels. Since, the introduction of the Internet sales channel was revolutionary in many ways, the travel agents felt threatened in the beginning. The tension between the airlines and the travel agents is not severally affecting the business of today. This because the change from the traditional channel to the Internet channel will not take place instantaneously, rather probably more slowly, especially in the beginning. This means that the airlines will remain dependent on the travel agents for probably some years. As much as 80% of the total sales still take place through the travel agents in the US, now two to three years later, the sales have only lowered a few percentage units. Airlines conducting business in a foreign market are even more dependent on the middlemen since they often do not have their own distribution network and they often have a more unknown brand.

Airlines still support and nourish the relationship with the travel agents and offer them sales promotions activities, sales incentives and bonuses. In broad terms, it is “business as usual”. Each airline understand the need of a good relationship since they are just one of hundreds of competitors in this dominant sales channel. The travel agents understand that Internet is the way of the future and one of their responses has been the implementation of their own Internet sales channel. As the airlines have two main channel types, direct and indirect, they need to take both in consideration and treat them in different ways.

7.1.3 Added Value
The customers appreciate the control and time independence the Internet channel offers. They do not have to rely on a third party to book their trips, they have the freedom to choose the place and time for it. In addition, they are able to ask more questions that they would feel uncomfortable to do with a travel agent. It is necessary for the airlines to analyze their Internet users’ behavior constantly and to adapt the content and structure of the site. The airlines biggest advantage gained by the Internet channel is the possible closeness to the customers. Also, another business benefit for the airlines is the possibility to gain customer ownership. This customer ownership is created due to the benefits the customers perceive in the Internet channel. A better information gathering and processing is feasible with a number of alternative Internet sales formats. The customer ownership and closeness bring the advantage of getting more feedback on how to develop the flight product and its services.
The added value the travel agents provide is mostly connected to booking complex trips, these trips cannot yet conveniently be booked through the Internet channel. While this applies to all customers, there are also advantages that relate to specific customer segments. For instance, organizations that appreciate the travel statistics that include all travels normally turn to a travel agent. The competency of the travel agents is in many cases the reason for using them both for individuals and organizations.

7.1.4 Financials

The experience from the airlines is that Internet is a viable sales channel and some have already have made profits according to the traditional investment analysis. All the airlines responded that they would not hesitate to invest in Internet again if they had the opportunity. Much of the benefits came from the saving alternative costs and it also opened up new opportunities. An impression from the airlines is that they constantly improve their Internet channel and they never feel they can rest. The pace is higher and the competition on the Internet is more intense. Some of the respondents said that the cost related to the back-end could be a surprise to many.

The barriers for the adoption of Internet have not meant any important implications for the decision about using Internet as a sales channel. The reason is that these are hurdles all the airlines are facing, i.e. it does not change the competitive environment. It is a concern for all commercial Internet sites and will eventually be satisfactory solved as technology develops and the behavior changes among the customers.

7.2 Managerial Implications

Mangers should not focus on lowering the uncertainty regarding Internet, instead they should emphasize on action. Making a business case is appropriate to get an understanding of the Internet implications, but, complete predictions should not be asked for. Managers need to get an understanding of the new rules of business related to network economics. For instance not to be a victim of “tipping”. Internet is a major strategic decision since it involves large amount of money and implies changes in all areas of the organization. Combined with the uncertainty this means that top management need to be involved.

There is a reason for the existence of the intermediaries. The functions that they provide cannot be eliminated even if the middleman itself is. To keep the trust of the middlemen it is important to communicate to them that Internet is bound to
evolve. If you create an understanding, it is possible to lower the tension and avoid conflicts. Even if the producer, a dominant market leader, it is still important to establish this understanding regardless if the producer will take the lead in the introduction of Internet.

In a future scenario, there will probably exist multiple channels. The choice of channel will depend on a number of factors: situation, customers, products, convenience, uncertainty etc. It is also likely that new actors will emerge, that will compete with the producer of the customer ownership. These new actors are not only new to the industry but, also of a new kind. These could create lock-ins without having product ownership, e.g. vertical facilitators, meta intermediaries, and community owners.

Managers should be aware of that investing in Internet is more of a commitment than a single action. IT investments are especially difficult to evaluate with all the future business benefits that are hard to anticipate. But, the value of these should not be neglected. A long-term view on the investment is critical to assess its value accurately.

7.3 Theoretical Reflections
We have studied the new phenomenon, Internet, using old theories. In large they hold true. The theories of network economics that are advocated by some researchers are useful when studying Internet according to our experience. There are researchers that express the need for more empirical studies on network economics, unfortunately we cannot contribute substantially since we found no evidence of deliberately using these concepts. Something that we can add to the knowledge of Internet business is how different customer ownership mechanisms relate to each other as shown in the GR matrix.
8 Epilog

After finding out about the ideas of network economics one might wonder why he/she never heard of it before. Is this something brand new? Well, the marginal increasing returns as a phenomenon was recognized early in the development of economics. Adam Smith’s “invisible hand” regulates each industry and forces it to equilibrium by setting a limit for the expansion of an organization. The marginal returns increase with volume and eventually the organizations in the industry will become more specialized. This restructuring of the industry occurs due to that it would be more profitable for each organization. Smith was aware of the concept of increasing returns in his example with pin-production where he showed how division of labor increases profitability. (Smith, 1779) Alfred Marshall was also familiar with increasing returns, and said that the business that first got a good start would corner the market, he did not develop the ideas further though. (Marshall, 1890).

These ideas have in large been ignored until recently. Some possible reasons for this might be that high technologies that supports increasing returns is a recent phenomenon. This is maybe part of the answer, but Gunnar Myrdahl discovered positive feedback mechanisms in the 1940s and 1950s, that were not the result of technology. The existence of several possible solutions to a problem were opposing to some especially to those taking a positivist’s view on science. (Arthur, 1994) In 1954 Schumpeter stated:

“Multiple equilibria are not necessary useless, but from the standpoint of any exact science the existence of a uniquely determined equilibrium is, of course, of the utmost importance...” (Schumpeter as cited in Arthur, 1994, p 4)

Some economist did not like the ideas since these would destroy the world of theories on an unique predictable equilibrium, that the market’s choice as the best one, and the assumption that companies are all price takers. Instead of embracing the new way of thinking they restricted themselves to diminishing returns, which were free from these anomalies and could be analyzed completely. (Arthur, 1994). Leibowitz and Margolis (1994) are not completely discarding the ideas but call for a sober view. They remind of Pigou in the 1930s, who they claim made some serious errors in his thoughts regarding the network externalities:
“Economists have demonstrated great resourcefulness in reconstructing reality to fit economic theory.” (Leibowitz & Margolis, 1994, p 137).

Because of the limited attention network economics has received we feel that both empirical studies and theoretical constructs are of value to the development of the field.

Our argument for choosing the airline industry was that it had adopted Internet as a sales channel early and extensively. As in any context, there are individuals with a different attitude. One of the most senior individuals in the UK travel industry has claimed that:

“... Electronic commerce will not have any noticeable impact on the travel trade foreseeable future.” (Taylor, 1999c)

On the question if he had ever used the Internet the executive replied:

“I’ve seen it. It was very slow.”

“How about email?”

“Of course not, I haven’t time to faff about with computers.”

(Taylor, 1999c)
9 References

Published


Bark, Susanne (1999a). Resebyråilska Oroar Inte SAS. *Dagens Industri*, June 1.


INTERNET- A SALES CHANNEL IN THE AIRLINE INDUSTRY


REFERENCES


Financial Times, The smarter supply chain, February 22, 1999


INTERNET- A SALES CHANNEL IN THE AIRLINE INDUSTRY


REFERENCES


INTERNET- A SALES CHANNEL IN THE AIRLINE INDUSTRY


REFERENCES

Webpages
Dagens Nyheter (1999), [http://www.dn.se](http://www.dn.se)

Unpublished


Andersen Consulting (b), Kontaktkonkurrens på framtidens resemarknad.


Explorative Interviews
GDS Representative, Mars 26 1999 & April 16 1999.
Travel Agent Representative, March 12 1999.
Travel Agent Representative, March 12 1999.
Travel Agent Representative, March 12 1999.
Travel Agent Representative, March 12 1999.
Distribution Manager, March 26 1999.

**Interviews Europe**
Distribution Manager 1E, March 31 1999.
Account Manager 2E, March 24 1999.
Account Manager 3E, March 24 1999.
Distribution Manager 4E, March 31 1999.
Internet Manager 6E, March 30 1999.
Airline Relationship Manager 7E, March 30 1999.
Airline Relationship Manager 8E, March 12 1999.
Internet Consultant 10E, April 16 1999.

**Interviews US**
Internet Manager 1U, April 26 1999. (Telephone Interview)
Internet Manager 2U, May 5 1999.
Internet Manager 3U, May 4 1999.
Internet Manager 5U, May 17 1999. (Telephone Interview)
The Internet is an electronic medium which facilitates a multi-way communication between computers or networks. Internet allows anyone to have a 24-hour-a-day presence and offer organizations the ability to provide information, customer support, on-line sales and customer feedback. There are surfers from Africa to Sweden that land on, visit, explore and interact with Internet daily. (Pitt, et.al, 1996) The Internet is not an overnight sensation - the history goes back to the late 1960s, when the Advanced Research Projects Agency (ARPA) of the Department of Defense formed ARPANET. It was established to develop information technologies that would help the United States to counter the Soviet launch of Sputnik. Consequently, in the beginning it was a computer network consisted primarily of research universities and military contractors. The first e-mail was sent by accident in 1973 when two programmers decided to send each other messages, not merely transfer files. At the same time TCP/IP\textsuperscript{25} (transmission control protocol/Internet protocol) was developed and the purpose was to connect different networks so information could be sent from one computer to another. Since then, linked by leased telephone lines, it has grown into a matrix of several thousand connections in over one hundred countries and several continents. Its general infrastructure contains applications such as e-mail, World Wide Web (WWW) and discussions groups. (Kalakota & Whinston, 1996)

The phase Internet is in today, the commercialization and privatization, started in the beginning of 1990 due to removed government restrictions in the USA. One of the milestones was when a browser\textsuperscript{26} (Mosaic) for the WWW was distributed free over the Internet. It was then businesses and media suddenly realized there was something called Internet and began to take an interest in its exploitation. The ultimate goal today is to make advanced computing and communications information infrastructure available to a larger segment of the society. The question is no longer whether e-commerce will occur but rather how widely and fast it will spread. (Kalakota & Whinston, 1996) After only four years, Internet had 50 millions of users, which can be compared with the 13 years it took for the TV to get as many users, see figure A (Morgan Stanley, 1999). One estimate has been done that the Internet traffic currently doubles every 100 day (Inktomi, 1998). The future and goal of information technology represents the convergence of computing, entertainment, telecommunications,  

\textsuperscript{25} A standard message format for communication between computers.
\textsuperscript{26} An application to show documents published on the World Wide Web. Other brand names are “Netscape Communicator” and “Microsoft Explorer.”
the Internet, cable TV, publishing and information provider industries. (Kalakota & Whinston, 1996)

**Figure A:** The adoption time for Internet has been much shorter than any previous media (Morgan Stanley, 1999).

**Sources**
In present time “Information Age” is an often used term. Our time being an Information Age is true in many ways, a vast variety of media give us access to an overwhelming amount of information. The term “information overload” is used in our daily language. Still, did information not exist before? Were our ancestors really that ignorant and did they not use knowledge? If the history is examined an earlier “Information Age” will be discovered some 500 years ago. With the development of printing combined with cheap paper came a wider availability of books to the general public. During this era the ancient Greek philosophy was replaced with modern scientific views of the world. The language used in the books were the locally spoken ones instead of e.g. Latin which was common before that (Lecture, 1998).

The creation of the Greek alphabet, 2300 years before printing, was the first system able to capture the nuances of speech. The impact of this innovation maybe even outperform the computer. An even greater innovation was the very creation of writing 2400 years before that in Mesopotamia. The effect of it is by far the most important event in the information field. Why? The ability to write actually gave birth to information as an entity of its own, separated from the human body. (Hobart & Schiffman, 1998). Even if it can be argued that e.g. an archeologist can get information from artifacts (Anderson, 1979) perhaps older than the ability to write, we think there is a point in having a humble perspective on the use of the terms “information age” and “knowledge society”.