

Sales Channels – A Barrier to Entry in the Airline Industry

by

Maria Dembrower and Daniel Grenblad,
Stockholm School of Economics, Stockholm¹

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¹ Maria Dembrower, M Sc. Phone: +46-8-736 97 37.

Daniel Grenblad, Ph D Candidate. Phone: +46-8-736 95 48, <http://www.grenblad.com>

Both at Stockholm School of Economics, Center for Marketing, Distribution and Industry Dynamics,
PO Box 6501, SE-113 83 Stockholm, Sweden.

Authors are listed in alphabetical order to signify equal contribution.

Abstract

Growth in the Airline industry has taken place in the low cost segment. With their low prices the low cost Airlines have attracted new kinds of customers and travels, created new market segments and thus expanding the total potential market. This industry growth is hindered by several factors; flight rights, slot rights, and environmental factors (like war threats, slow economy, and established alliances). This paper examines if another factor, the distribution channel, also can prohibit new entries into the market. The main research question in this paper will be to study the distribution strategies chosen by new Airlines, given the two options; the Travel Agent and Internet. Secondly, we will discuss if the distribution of ticket sales could constitute an entrance problem.

The CRS (Computer Reservation System) provides centralized information and booking facilities for air travel and other products, thus acting as aggregators. The CRS has long had an important position in the distribution channel serving the travel agents. However, since the CRS required both infrastructure investments and specialized knowledge, the travel agent has retained an important position in the distribution channel. As the Internet became commercialized in the second half of the 90's, the end-customers gained direct access to various ways of booking and increased their power. For the low cost Airlines that emerged, this meant that they had an option to either distribute through the traditional channel or through the Internet channel. The Traditional Travel Agent still accounts for a large part of total sales through established relationships with customers. The Internet, on the other hand, has been a challenge to traditional ways of distribution.

Empirical data is gathered from Airlines operating in Sweden. Supplemental data comes from the largest travel agents in Sweden. The interviews were conducted in 2003. Analysis will be made using Network Theory, where actors in the network contribute with resources of different relative strengths and create dependencies through linkages (Håkansson & Snehota, 1995).

Our preliminary findings show that there are at least five different ways Airlines can position themselves in the distribution channel network; through Traditional Agent, Agent Web, CRS Web, Proprietary Web, or Collaborative Web (these will be further explored in the paper). Which alternative(s) the new entrant should choose is not self evident. Once chosen, there seems to be an entrance problem when the new Airline tries to get a position, since it does not yet have a given place in the distribution network. Thus, there may be an entry barrier with the selling of tickets and to attain a position in the industry, i.e. to reach the customers and create revenue.

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1. Introduction

Deregulation of the Airline industry in Sweden starting July 1st in 1992 has eased the establishment of new Airlines such as low cost carriers. The increased use of Internet has made it easier for new actors to find distribution channels and to sell their tickets over Internet. But still the Traditional Travel Agents play an important role on the market because of their long term relationships with companies which can offer them loyal business customers. The fact that the new carriers don't have a well known name and don't have any established relationships with the Traditional Travel Agents could make it hard for the new actors to grow.

The separate areas of changes described above makes it interesting to examine the intersection of those, namely the combination of new Airlines and new ways of distribution in this industry. The purpose of this study is to examine if ticket sales itself could constitute an entrance problem. To do this, we first analyze which distribution strategy each type of actors has. The intention is that this paper will serve as an explorative study and render future possible research.

2. Method

We used judgmental sampling and selected two actors from each actor type in the Airline industry sales network in Sweden. This sales network consists of Airlines, CRS:s, Web Sellers and Traditional Travel Agents. We have chosen to exclude the end-customers from the interviews even though they are a part of the sales network. The interviews were made over the telephone with marketing managers, sales directors and/or managers responsible for relationships with other actors in the network, see Figure 1.

In this study we have not interviewed all the different types of Airlines. We wanted to interview a second low cost carrier (in addition to Sterling) that had implemented a Proprietary Web, but experienced non-response from the Airline. We also experienced non-response of one of the CRS:s and from one of the selected actors from the Web Seller group, the Collaborative Web. During the study we became aware about that it would have been preferable to interview one of the Airline partners in the Collaborative Webs too. Unfortunately we couldn't incorporate that into our research due to time constraints. Since we had several other actors contributing with complete answers, the non-response and narrow sampling have a limited impact of this explorative study.

Company	Actor Type(s)	Respondents' Roles
SAS	Airline (Traditional International Carrier, Web Seller (Proprietary Web))	CRS Relationship Mgr (15 April 2003), CRS Information Mgr (15 April 2003), Marketing Director (22 April 2003)
Skyways	Airline (Traditional), Web Seller (Proprietary Web)	Marketing Director (25 April 2003)
Sterling	Airline (Low Cost), Web Seller (Proprietary Web)	Country Marketing Mgr (23 April 2003)
Amadeus	CRS	Marketing Director, (22 April 2003) Technical Specialist (24 April 2003)
Nyman & Schultz (American Express)	Traditional Travel Agent	Marketing Director (15 April 2003), Airline Relationship Mgr (21 April 2003)
Ticket	Traditional Travel Agent, Web Seller (Agent Web)	Marketing Director (14 April 2003), Airline Relationship Mgr (25 April 2003)
Resfeber (Travelocity)	Web Seller (CRS Web)	Vice President/Marketing Director (11 April 2003)

Figure 1: Interviews made with the case companies during April 2003 (Own development).

The three interviewed Airlines are of different kinds. Their age varies from established in recent years to 50 years of operation, the size also varies greatly. The route network operated is also different in scope and also type. Some of the airline companies fly from point-to-point (like Sterling) while others use a spoke-and-hub network (like SAS).

The current world events like Iraq war, SARS, and slow economy may have influenced the respondents' attitudes and made them more prudent in their statements on e.g. competitive impact.

3. Network Actors

Airlines in this paper are the scheduled airlines, thus charter, freight and taxi airlines etc are excluded.

CRS, Computer Reservation Systems, are the aggregators that gather the Airlines' and other travel producers' offerings in one place and make them available to travel sellers equipped with a suitable computer. In essence, the *CRS* sell information distribution to the Airlines and information access to the travel agents etc. *Traditional Travel Agents* refers to the brick-and-mortar travel agents that have a broad range of products in categories such as Airlines, Hotels, and Car rental etc.

Web Sellers mainly use Internet as their customer interface. Four sub types in the Web Sellers group have been identified: *Agent Web*, a travel agent with Internet as the main customer interface and sells many Airlines tickets, makes hotel reservations etc. Some Traditional Travel Agents have a web interface in conjunction with their physical stores. *CRS Web*, an online travel agent owned by a *CRS*. *Proprietary Web*, a web interface owned and operated within an Airline's organization. This Web Seller often only offers its' own tickets. Sometimes other Airlines' offerings are also available; tickets on Airlines in the same alliance are more common to be offered in this case. *Collaborative Web*, a joint-venture between Airlines with several Airlines' offerings; the owning Airlines' and others.

Other actors that are selling tickets, such as Airline's ticket offices, call centers, and consolidators, and tour operators are outside the scope of this paper. Actors that are discussed here are presented in Figure 2.

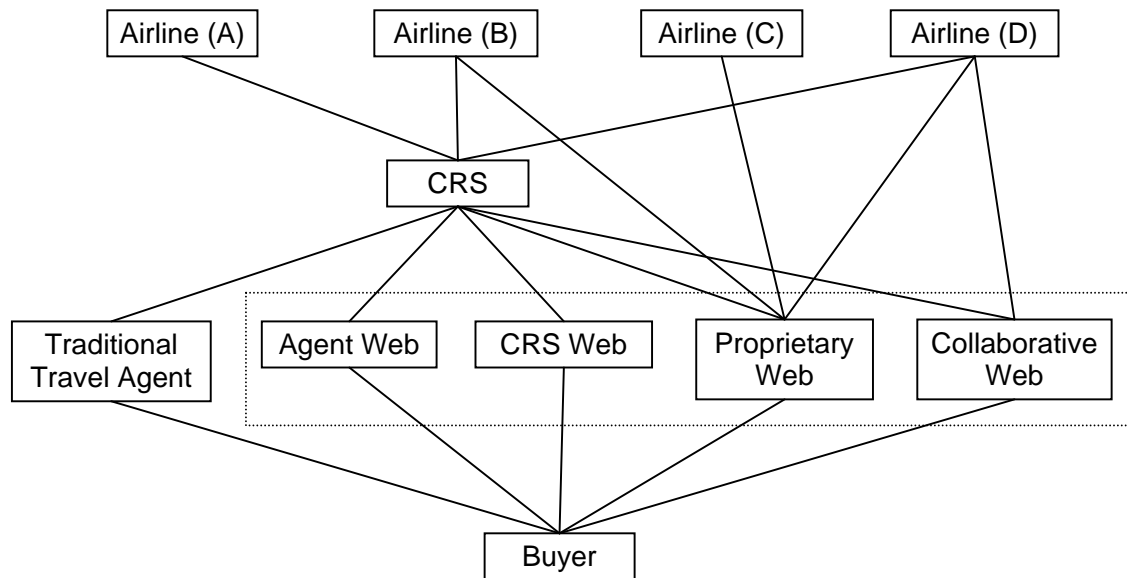


Figure 2: The Sales Channel graph, showing alternatives that Airlines can use. Airline (A) to Airline (D) depicts typical way of using the Traditional Travel Agents and Web alternatives. (Own development).

Airlines started to develop CRS jointly in groups of Airlines. It resulted in four major CRS companies; Amadeus, Galileo, Sabre, and Worldspan. For a long time the dominating way of selling Airline tickets was through the CRS to Traditional Travel Agents, like Airline of type “A” in Figure 2. In the mid 90-ties, Airlines started to use web sites operated by them to sell tickets in addition to the CRS channel, depicted by Airline “B”. One of the first was British Midland that started to sell online in January 1995. Some chose to only sell through their own Proprietary Web, like Airline “C”. It was many times low-cost carriers who did it to cut transaction costs associated with ticket sales. The lowest cost would be when the web site is directly linked to the Airline’s inventory. Many Airlines still use CRS, even for their Proprietary Web. (Grenblad & Rosén, 1999) The Internet opportunities also gave birth to a new form of collaboration between Airlines, where they created a joint-venture web site, Collaborative Web. In this case there is a mix of directly connected Airlines and the ones connected through a CRS. Several Airlines tickets are aggregated to one web site and then sold on the web site directly to the end-customer. Airlines involved as an owner in a Collaborative Web is shown as Airline “D”. Today, the traditional Airlines use several sales channels simultaneously and Buyers alternate their choice of channels.

4. Theoretical framework

This paper takes on the markets-as-networks approach (Mattsson, 1982), which is a different research stream compared to the marketing-mix approach (Borden, 1964). Markets-as-networks is well suited in this case because it acknowledges multiple actors and interdependence among them, rather than a dyadic transaction based relationship. All actors contribute with different activities and resources, so that the Airline ticket can be sold to the end-customer. A definition of a network is:

“A network is groups of two or more connected relations”.
(p. 725, Cook & Emerson, 1978).

The boarder of the network is limited here by using a more narrow definition of the network where only those actors that are acting towards a shared goal are included (Van den Ven & Ferry, 1980). Here in this paper the shared goal is to sell Airline tickets.

What characterize a network are the actors and dependencies between them. Examples of links could be dependence of each others resources, such as technical solutions, or social relationships. Dyadic relationships are also of importance, because of the indirect links through the dyadic actor to the rest of the network. The strength of the links varies depending on the situation. The links between actors can be of different sorts. The link can be direct between actors or indirect through other actors.

Relationships between actors can be look upon in closer detail and three different basis for links are possible (Håkansson & Snehota, 1995):

- Activity-links; technical, administrative and commercial activities that can be connected to other actors and in this way develops a relationship.
- Resource-ties; connects various resources (technical, material, knowledge etc) to the company.
- Actor-bonds; connects actors and affects how the actors are perceived. This link also influences their identities and organizational structure.

With a market-as-networks analysis, the actors within the network can better understand their business context: Who are the dominating actors, not only through size, but also in terms of centrality in the network. Are groupings within the network are unevenly distributed and less accessible. If there are power hierarchies were actors are able to influence how others should act. It also helps the interpretation of other actors' strategies and actions.

4.1. Which distribution strategy does each actor have?

First we describe the empirical findings of our research which will be continued by analysis of the empirical findings.

4.1.1. Airline – Empirical Findings and Analysis on Strategy

Actors the Airline is depending on are CRS, Travel Agents, booking system suppliers, IATA and credit card companies. The main sales channel for traditional Airlines involves the travel agent. Some Airlines see the travel agent as a sales channel partner and others see them as customers. Difficulties related to these relationships include high costs of the CRS service and travel agents' trust in the Airline. New cost Airlines are more often trying to use Internet as the main channel. Established Airlines often have a diversified sales channel strategy. New Airline have a more focused strategy, probably because of a lack of resources needed to use multiple channels. It has been suggested that the Internet is more suitable for younger customers and travel agents for older. Internet sales are seen as a less costly sales channel. Other Airlines can constitute partners as well as competitors. When the Airline wants to offer interlining (a combined ticket for travel on different Airlines) an agreement with the Airline might be needed in addition to the available industry rules. A small but important part of the Airlines' revenue comes from direct agreements with corporate customers for a certain amount of travel for a predefined price. The interviewed Airlines also said that they needed booking systems and other IT resources such as CRS.

The Airlines seem to be well aware of their dependence on other actors and that they together act in a kind of system (here denoted as the sales network). Some of the dependencies are indirect through other actors; the best example is the Travel Agent dependency. They also recognize that they need certain resources that they get from other actors, e.g. the system provided by CRS companies. These circumstances can better be incorporated in the market-as-network theory compared to a transaction based theory, which would suggest that the theoretical frame work used in this paper is well suited. Other Airlines see the Traditional Travel Agents as customers, a link more based on activity-link. The Airline/travel agent link is stronger in the partner situation. Difficulties related to the relationship are the CRS costs to involve the travel agents and that is why many new low cost Airlines use Internet as their main channel.

4.1.2. CRS – Empirical Findings and Analysis on Strategy

The overall activity performed by the CRS is connecting the Airlines with the travel agents. Travel agents are seen as customers. Both web and physical travel agents are served. A well defined distribution strategy is needed, so that marketing is performed towards the right target group. CRS systems offers different levels of support aimed at business travel. The use of CRS Web travel agents varies between CRS:s and geographical markets. When making the choice if a web channel directly to the end Buyers should be used, the relationships with travel agents are considered. There are a relatively few large actors in the Swedish air travel market such as CRS, business travel agents, and corporate customers. The CRS were created to cater to the needs to the traditional Airlines, which means that the needs of Airlines with new business models might not be appropriately supported by the CRS.

In those cases new Airlines have to create new solutions. The CRS companies see themselves as a service unit towards the Airlines, a resource-tie. Both on and offline Travel Agents are thought of as customers, thus an activity-link.

4.1.3. Traditional Travel Agents– Empirical Findings and Analysis on Strategy

The view of the travel agent's business is not completely shared by all people, not even at the same travel agent. One respondent was certain that their role was to provide various travel management services to the customers and act as their purchasing representative. Another respondent at the same travel agent saw their role as sellers of the Airlines' offerings.

Actors that they depend on are first of all CRS:s, travel producers and ticket whole sale companies.

To contact the customers the travel agents need resources such as telephone, e-mail and web. On the supplier side the CRS is crucial. Some travel agents use the CRS not only for booking tickets, but also for travel management e.g. customer profiles.

There has been a change in the travel agent industry where the agents role has shifted from being an advocate of the Airlines offering to being an advisor to the customer. One of the important drivers for this change has been the cannibalization of the travel agent channel made by Airlines' Proprietary Web. This meant that the travel agents had to define their position clearer to justify their existence. A second driver is the related change of

compensation given by Airlines; the commission has been lowered or removed completely. This meant that the travel agents had to find new sources of revenue, resulting in “consulting fees” charged in parallel to the ticket price. (Grenblad & Rosén, 1999) The respondents at travel agents showed that they are not, as of today, completely certain what they are. Are they still selling on behalf of the Airlines, or are they helping customers to buy?

Resources needed to link to the customers are telephone, e-mail, web, and physical stores. A necessity for the travel agents business is the CRS resource because without it they wouldn't have much to sell. Even if some tickets are bought through Proprietary Web, the vast majority comes from the CRS.

4.1.4. Web– Empirical Findings and Analysis on Strategy

Activities needed for a web travel agent to function include direct sales, technical unit, production unit, and sales unit. In addition a focus on marketing is seen as important. An Internet access provider is a relationship that has to work for the web actor. “Meeting the customer” is one rule mentioned for organizing the distribution strategy, meaning adapting to a customer segment’s habits and needs. The Internet is seen as the most important channel, with support from telephone. A major advantage of the channel is the speed: E.g. when there is an opportunity to sell an attractive, but time-limited product, it can quickly be offered and sold to the customers. The least important is physical stores. Just as for physical travel agents, some web travel agents are also packaging products into an offering, in addition to trading travel products.

A special characteristic of the Web Sellers is the dependency on the resource Internet connection. To reach as many customers as possible it is of importance to create a strong brand.

5. Sales Network Link Analysis

All actors chosen to be included in the sales networks share the activity “selling airline tickets”. This common characteristic is not discussed for each one of the relationships, only those aspects that are signifying the relationship in other aspects.

Airlines contribute with resources to the CRS:s in the form of information on sellable products, i.e. the Airline tickets available of their inventory. A CRS can also be seen as contributing with resources to the Airline. This is the technical resource of the actual reservation system as a standardized interface to the travel agents. The link cannot be characterized as based on actor-bonds; the choice is more about how to get a more complete coverage of the market. Therefore it is more of a resource-tie, a relationship based on exchange of resources.

The Traditional Travel Agents and Web Sellers use CRS:s as resources for information on Airlines offerings and book Airlines’ tickets. Traditional Travel Agents that serve corporate customers are sometimes using additional resources, such as storing customer profiles and travel policy guidelines in the CRS, which means that they are more dependent on the CRS. The Traditional Travel Agent and CRS are linked through resource-ties. It should be remembered that Traditional Travel Agents can also have a web site where they sell tickets, an Agent Web.

Traditional Travel Agents and Buyers links to each other differently depending on the Buyer type and travel type. Leisure travel is usually less frequent transaction where the customer is indifferent to where the ticket is bought. More important is what kind of product is obtained for the price. This means shopping around for the best offer and the Traditional Travel Agent/Leisure Buyer relationship is limited to a resource-tie.

For Corporate Buyers that prefer long-term relationships implying that the linkage is based on actor-bonds, which means that linkages are based on social relationships and perceptions about the other actor. It is further emphasized by the fact that Corporate Buyers typically want to limit the number of suppliers. However, the relationship with the Corporate Buyer can also be based on resource-ties. This because the corporate customers often have demands for additional services in the travel management area, in which case the Traditional Travel Agent even might be embedded in the Corporate Buyers’ organization.

When the ticket is for a simple travel, e.g. between one metropolitan city to another in Europe, the link is mostly a resource tie. There is a different case with complex travel, such as a package of complementary products or difficult itineraries with several flight legs. It can also be an Actor-bond, a social relationship catering for trust, when the brand

of the travel agent influence which travel product is chosen to be used by the Buyer, e.g. to get advice on how to decide on alternative packages. Furthermore, complex travel can induce new activities taken on by the travel agent beside the finding and booking of tickets. This could be finding and providing information about the travel locations. New activities might spring out of the interaction, such as needs for additional services. It can be seen as an activity-tie, because it is a co-production with intense interaction between each actor. E.g. providing information on hotel booking or tailored sightseeing arrangements.

Traditional Travel Agents have relationships with Airlines for other purpose than the ticket reservation. It could be about promotional campaigns or special agreements on behalf of Corporate Buyers. The Airline's interest might be to nurture the connection with a large Traditional Travel Agent with many Corporate Customers. This relationship is an activity-link since resource use is not involved in that activity, rather it prepares for later resource use (via CRS). Other actors may also have such relationships, but they are less important.

The Web Sellers' links to the Buyer is more based on resource-ties, than the Traditional Travel Agent because the Buyers are in these cases comparing offers and prices more than seeking advice and augmented services. CRS Web, Collaborative Web, and Proprietary Web have linkages to the Buyer that are clearly resource-tied.

One of the Web Sellers, the Agent Web, is in one way similar to the Traditional Travel Agent. The actor-bond is present in this link too, with the role that brand has as a "guarantee" for the products offered. It is possible that Buyers who are new to online purchasing prefer to use an Agent Web that they are familiar with, i.e. those that are Traditional Travel Agents too. However, it is weaker in the aspect of social relationship. The Agent Web relies on Internet as the main interface; personal contact is possible through the telephone but still not a primary mean of communication.

CRS Web links are strongly based on actor-bonds since they are tied legally through ownership. It would be unlikely to find the CRS Web to use another source for the products sold. There is of course a resource-tie with the technical system involved, just as e.g. an Agent Web actor.

Collaborative Web and Proprietary Web have the option to link to CRS for product sourcing, or to connect directly to Airlines' inventories. One of the Collaborative Web actors, Opodo, is partly owned by a CRS, Amadeus, which wants to influence this strategy. Both the Proprietary Web's and Collaborative Web's link to the CRS, is mostly a resource-tie. The Proprietary Web is strongly linked to an Airline through an actor-bond, due to the ownership. The Collaborative Web has actor-bonds to several Airlines, since it is a joint-venture between Airlines. While the Collaborative Web is operated as a separate company, the Proprietary Web is typically a unit within the Airline's organization.

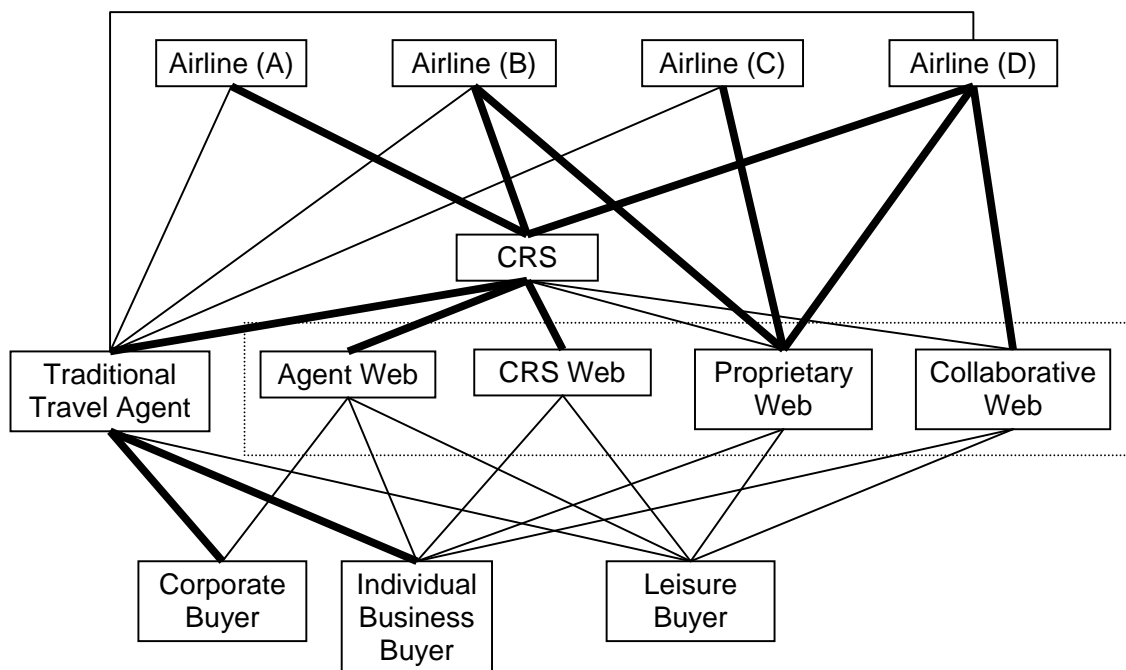


Figure 3: The Sales Network Link graph, showing relationships between actors. Stronger links are displayed with thicker lines. (Own development)

6. Implications of Links

From the perspective of the Airline, the links discussed above have the following implications. Airlines use the CRS not because of the CRS itself. The reason is to reach the resellers in turn use CRS. I.e. the CRS serves as an indirect link to the Traditional Travel Agents and to the Web Sellers. The advantage of this is the market coverage that is achieved. A vast majority of the Airline ticket sales still goes through CRS. The main disadvantage is the high cost per sale of ticket, compared to the Proprietary Web alternative.

For this reason, new Airlines have been seen to focus on the Proprietary Web channel. Still, it is not associated with lower cost in every aspect. The Airline is believed to need a larger marketing budget in order to make the Buyers find the web site and to trust the product offered. When Airlines use the Traditional Travel Agents this marketing cost is in part carried by them.

The advantage of having direct distribution is also to gain better ownership of the Buyer (Grenblad & Rosén, 1999). This means more information on the customer and better possibilities to influence them e.g. through customized campaigns. A downside is the reach of the Web Sellers' channels, only counts for a smaller part of total Airline ticket sales.

Airlines try to shift the customers from the Traditional Travel Agents to Proprietary Web through using low prices only available at the Proprietary Web. The reason for this could be that the actual ticket cost less there and/or the sales cost associated with the CRS travel agent channel has been eliminated.

The analysis of the individual links above leads the discussion of what it means at an aggregated network level. The strong relationships to and from the CRS actor and centrality in the sales network indicate power in the network. It could be an explanation of the relatively higher net profits (DOT) of the CRS systems, compared to the other actors in the network.

6.1. Network Changes

The network approach gives the opportunity to describe types of changes: First, a refinement of existing activities and resources, a *Structuring process*. Structuring is a continuous process as it changes both the technical and the social elements over time. Structuring implies that actors try to improve the utilization of the ideas, through refining technical connections and rationalizations. This requires increased standardization of input and output and in this way resources are used more efficiently. The network is made clearer and stronger through this structuring process. This process involves several actors and relationships that are essential to change the industrial network. The Critical elements are the social interactions. Individual companies initiate the changes and they have impacts on the whole network.

Second, develop new ways of combining activities and resources, *Heterogenization process*. This process implies that the actors try to apply new ways of using the resources of the same activities. Heterogenization competes with the Structuring process, because it develops alternatives to the established structure. The process can be done within the established network or it can be done with the help of companies belonging to other networks. While the Structuring process increases efficiency, the Heterogenization process increases effectiveness. Both of the change processes seek to limit the resources used.

The companies want to control resources, which leads to two other change processes. The relationships can be seen as ways of creating opportunities to combine resources and to mobilize other actors' abilities to solve the problems. Increasing control of activities and resources held by fewer actors can be seen as a third change process, a *Hierarchization process*. The Structuring process is a foundation of the Hierarchization process. When a network is structured it allows for another process, where fewer and fewer control more and more. At the same time the actors get more limited connections between activities and resources. One way of getting more power in a network is through controlling more resources and activities. By controlling the resources, the actors get more power in relation to other actors. It can be achieved through ownership or relationships with actors that possess the resource. For the individual company it means conflicts (e.g. price competition) and cooperation (e.g. coalitions) simultaneously.

A competing process to the Hierarchization that we label the *Dilution process*. In this fourth process, the control over activities and resources get distributed over more actors. The different actors continuously affect these development patterns. Each actor usually belongs to several networks, how the development patterns look depends on which network that is used during the analysis. The network approach highlights the interdependence among actors that changes typically have repercussions for several

network members. Adjustments of strategies etc are important to survive in the network and those who adapt are more likely to enjoy success. (Håkansson, 1992)

The major changes mentioned in the introduction, deregulation and e-Business, has lead to changes in the whole Airline industry.

The lack of competition and the dominance of a few actors on the Swedish market have made the policy makers to deregulate the Airline market in 1992. The aim of this deregulation was to make it easier for new actors to enter the market and increase the competition between the firms. The effects from the deregulation were not before the end of the 90's shown on the market through the establishment of new Airline firms. Low cost Airlines perhaps have received the most attention. They have performed the activity travel in a new way, by flying point-to-point. Airports were used as resources in a new way as they contributed to the marketing of the Airline's flight route. Thus, it can be categorized as a Dilution and Heterogenization process.

When Internet started to be used commercially in the mid 90's (Grenblad & Rosén, 1999), Airline tickets were one of the earliest products to be sold. Incumbent Airlines developed web sites to sell tickets. It was a new combination of resources triggered by the enabling technology Internet. In other words it is a Heterogenization process. A stronger over all change for the traditional airlines might be structuring of their business triggered by the increased competition from the low cost carriers. The change can be seen as a form of developing the existing activities and resources, a structuring process. There would probably follow mergers Hierarchization among traditional airlines where fewer actors control activities and resources. On the other hand, the low cost carriers' entries have developed the industry towards Dilution and Heterogenization.

Internet also introduced new Web Sellers to establish on the market. Some of these new actors even came from other industries such as software (Expedia/Microsoft). In addition new actors appeared that used Internet as their primary channel. Web Sellers are involved with the existing activity of selling tickets using the new resource. This is probably the most obvious Dilution and Heterogenization process.

Traditional Travel Agents are simultaneously in a Structuring and Heterogenizaion process. Structuring is the development of existing activities and resources, e.g. in the area of services for travel management. Travel agent might merge to increase the efficiency through a Hierarchization process. Some Heterogenization takes place through using the new resource, Internet.

The Traditional Travel Agents are competing with the growing Web Sellers. The entrance of Web Sellers has induced the balance in the network. This has forced the Traditional Travel Agent to rethink their business model and operations. This has meant selling through the web and not just selling through the physical stores and through the

telephone. They have also tried to create stronger relationships with both the airlines and the CRS actors that they still give them attention. Since the role between the CRS and the buyers has been challenged, the Travel Agents have been obliged to clarify their position in the network and where their loyalty is. Are they on the sellers' side or are they on the buyers' side? If it is a Traditional Travel Agent that target corporate buyers they have been leaning to being an allied of the Corporate Buyers. If it is a Traditional Travel Agent that target leisure buyers they are still in many ways sellers of the travel producers' offerings. Over all it means that the Traditional Travel Agents and Web Sellers need to find "available" competitive positions.

CRS actors have developed their existing activities and resources, through a Structuring process. Beside of this the CRS Web is using the new resource Internet, a Heterogenization process taking place, adding a new type of actor to the network, a Dilution process. The numbers of CRS actors are already a few on the market and we have not seen that it has been another Hierarchization process yet. The CRS Web companies will probably develop as the other Web Sellers will do.

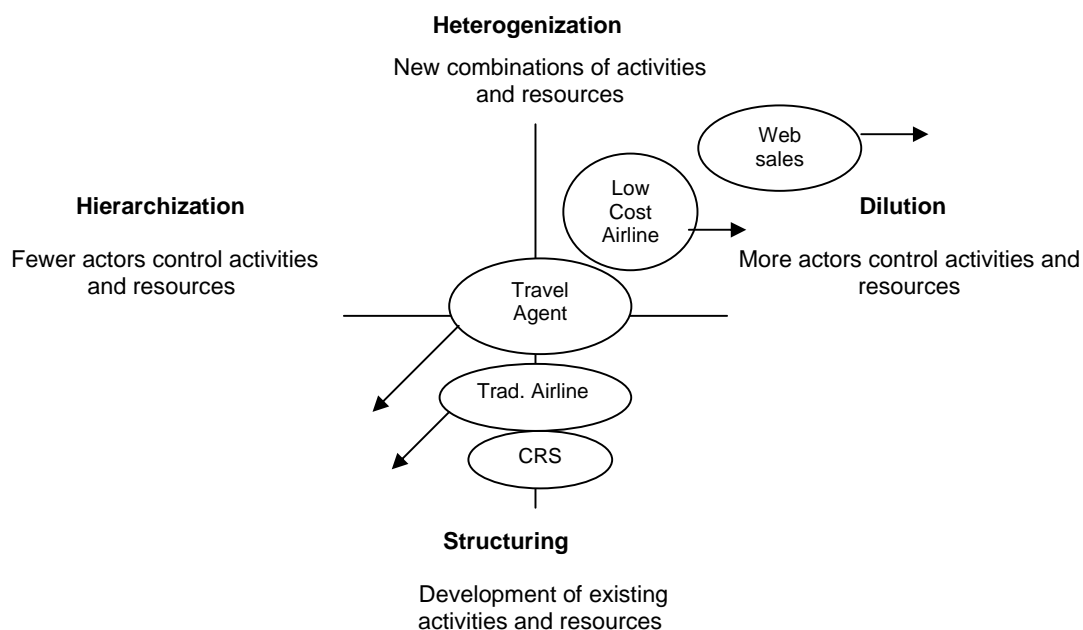


Figure 4: Actor changes in the network relationship perspective. (Own development)

6.2. Can ticket sales itself constitute an entrance problem (new Airline)?

First we describe the empirical findings which then will be analyzed with help from the theoretical framework.

6.2.1. Airline – Empirical Findings and Analysis on Barriers

Something that can be an entrance problem is the necessity of early revenue due to the high upfront costs when starting up the business. For an individual flight to give a net contribution to the firm a high load factor is needed. Which for a low cost carrier typically should be higher (perhaps 80 %) than for a traditional carrier (perhaps 60 %). This means that a strong sales strategy is crucial. The Airline industry is regulated in some ways, both by industry actors, e.g. IATA, and public actors, e.g. EU. The regulated environment puts constraints on the kind of activities feasible to undertake. Direct Internet distribution results in lower distribution costs that will enable lower ticket prices.

A more extensive Airline/Airline agreement for interlining might not be possible for a new Airline to get. For instance if the potential Airline partner already have such agreement for the route through an alliance. If the new Airline chooses to participate in the traditional sales channel, they are depending on the CRS:s because they function as the link to the physical and online travel agents. With the alternative of direct Internet sales, a solution for the payment of the tickets is needed. Usually this means that credit card companies are involved.

The new Airline needs to build a strong brand early. The brand represents the trust needed for the travel agents to promote the Airlines offering, especially towards corporate customers. The brand also influences the traffic and sales of the Internet channel. Credibility is a key factor for success; the Airline should not risk disappearing from the market. Furthermore, since the customers essentially are buying time when they choose flying as a travel option, they must have reliability in the booking and flights. Numerous departures on the same route add to the “shelf-space” in the CRS that the travel agent sees. This can be further accentuated by code-share agreements. In both cases it is an advantage to a larger established Airline.

Especially the newer Airline mentioned the importance of financial endurance to enable the advertising that would attract customers to their Internet channel. Financial strength is also believed to influence the trust given by the travel agents.

Some Airlines have indicated an interest in lowering their dependence on other actors by doing more of the activities themselves, such as direct distribution through Internet. The relationships that the actors already have influence both current and potential relationship. (Håkansson & Snehota, 1995) An example of this is the difficulty of getting an Airline/Airline agreement, especially when you are a new actor on the market (in other words an entry barrier).

Brand in the shape of credibility and reliability is once again mentioned that as a resource that would be needed to create a good brand to the customers. Combined with the high upfront costs it calls for good finances and early sales volumes.

6.2.2. CRS – Empirical Findings and Analysis on Barriers

A possible barrier for a new Airline could be to get a strong enough brand which is recognized by the travel agents. A reason for the need of large financial resources is the difficulties of changing customer's habits. This also means that it could be wiser to adapt the strategy to the customers' present behavior, perhaps by using travel agents since they still sell the majority of tickets.

The new Airline could experience the cost of technical systems as a barrier, e.g. to connect to the CRS:s. Connection to BSP and credit card company is needed for the payments. A way to get some of the distribution channel resources needed is by using hosting services offered by actors such as EDS and Scandinavian Airlines. It is important to find strategic places where to do the sales, e.g. which travel agents to focus on. The travel agents must believe in the survival of the new Airline, since the travel agent is betting their own brand when they sell Airlines tickets. This is especially important in business travel, because the travel agent and corporate customers are usually seeking long-term relationships. It is important to gain revenue fast due to the fixed costs and since it is impossible to sell seats once the flight has departed.

The trust and expectations regarding the new Airline is important. Rumors could have an impact on the relationships with the travel agents.

When choosing channels the new Airlines might choose direct sales when they focus on leisure travel, since it is characterized as single transactions. Business travel is characterized as continuous relationships. Travel agents offer larger sales volumes. Large corporate customers do not only mean benefits in terms of large potential sales. The downside are demands for a more developed booking system that includes more features and service, more demanding professional purchasers, and more price pressure. The travel agents often "own the customer".

The resource financial assets appear to be an important factor for the success of the new Airline. One reason is that it is directly linked to the perceived brand credibility and also a mean to create a strong brand. The brand can be seen as a necessary Airline resource for the actor bond between the travel agents and Airlines to emerge on the market. The travel agent does not want to risk their own brand resource especially those who work with corporate customers since it is a lasting cycle based of activities. Especially large corporate customers use the travel agent as a resource that provides travel management. New Airlines have to consider the resources as the BSP, credit card company for payments.

6.2.3. Traditional Travel Agents – Empirical Findings and Analysis on Barriers

An important activity is to create a strong brand, so that the Airline could be seen as a viable actor by the travel agents. The travel agent is putting their own brand at stake, if they sell a questionable product to the customer. Marketing is needed to create the brand and to drive the sales. The direct sales alternative leads to lower ticket distribution cost. Due to the large initial costs, immediate revenue is of importance. Which stress the need for a viable marketing strategy and implementation. The new Airline might want to cooperate with other Airlines e.g. to create a strong brand.

Good market knowledge is needed. Which is the target group and how should it be reached? Sales staff is needed as a complement, even if the web is used. Money is needed for the marketing. If the Airline chooses to use a web interface for the travel agents it must be adapted to the travel agents needs.

Many traditional travel agents cater to all kinds of customer groups. Nowadays the respondents point out the increased importance of defining the target group and understanding it so that the marketing activities are effective and efficient. The customer group of this business must be recognized as being different compared to others.

6.2.4. Web – Empirical Findings and Analysis on Barriers

According to a web travel agent, a new Airline requires travel agent sales and agreements for cooperation with other Airlines. Costs faced by a new Airline are for adapting the booking system to travel agents and CRS:s. The new Airline must get large sales volumes to reach the load factor targets. The largest sales volumes are believed to continue to be through the travel agent channel in the next few years. They have speed in larger sales volumes, the ticket should be electronic. Resources needed include good finances, a long-term business plan, customer knowledge, technical knowledge, IT-support, access to a booking system, and agreements with CRS. The chosen sales channel solution should be simple. The Airline's sales system must be adapted to travel agents.

The suggestion to use travel agents is because of their ubiquitous stores that constitute a big resource, since it gives such broad market coverage. This could be something that would help to achieve the load factors needed due to the economics of Airlines. Electronic tickets can be seen as a resource as it eases the distribution of sold tickets. The new Airlines resources in the shape of technical systems should be in accordance with the travel agents demands to create an actor bond. The obvious way of doing that is to use the CRS system and it is however to a small extent also with web interfaces.

The already mentioned necessity of an Airline brand is confirmed with the travel agent respondent. It can be interpreted as corresponding the actor-bond type of link as an important impact for the overall relationship. Another area of consensus is the need for the Airline to get revenues quickly. From a network perspective the need of fast incomes lead to the importance of having a good financial situation before you start to operate. If the Airline cooperates with an actor outside the sales network it can amass the resources needed in a better way than relying on their own finances. Or, a second opportunity is to create an actor-bond with an established actor (Håkansson & Snehota, 1995), e.g. an Airline of good reputation and thus improving their own brand. A third issue confirmed is the need for adaptation of web interfaces.

7. Discussion

The large volume of Airline ticket sales is still in the Traditional Travel Agent channel, approximately 80 % of all sales (empirical finding from interviews). High growth of sales is on the other hand taking place in the Web Sellers' channels. Online travel sales in Western Europe increased by 53 % in 2002, while total travel sales increased only with 1.2 % (CRTR, 2003). This indicates that the Web cannot be neglected as a channel, even if the volumes still are small relative to the Travel Agent channel. For the Airline it means that Web Sellers are important to them. This is especially true for the Proprietary Web and Collaborative Web, since these are the Web Sellers' channel they can control through their legal ties.

Traditional Airlines have a legacy in the Traditional Travel Agent channel, why choosing between using them or not is already made in a way. For them it is more about how much emphasis they place on the Proprietary Web. For new Airlines it is a different case. Without having any established relationship to take into account, it allows for more freedom to choose the channel that seems to fit their business model. The two main alternatives and their differences are:

- The Traditional Travel Agent channel with 80 % market share (empirical finding from interviews). The channel suffers from higher cost per sold ticket due to the CRS and Travel Agent intermediaries, which translates into higher priced tickets. These incremental costs for each sold ticket are distributed over time and can thus be seen as a marketing expense. Since this is an established channel, buyers know how and where to find a Traditional Travel Agent. I.e. there is no marketing cost associated with creating this awareness. All Traditional Travel Agents more or less have possibility to sell all Airlines, i.e. as soon as the buyer is at a Traditional Travel Agent the Airline's offering can be sold. Airlines however loose control over the sales situation, they have to rely on advertising and incentives to influence the purchasing choice.
- A Proprietary Web channel. The Web Sellers as a group has about 20 % market share (empirical finding from interviews). A first limitation of this channel is that the potential market is smaller since not every one use Internet. For countries in EU and North America Internet usage in September 2002 ranged from about 20-70 % of the population (Nielsen, 2003). Secondly, with 40 Million web sites (Netcraft, 2003) the chance of ending up at unknown site by luck is small. To get a part of the web sales, large marketing expenses must be made to create awareness even before flight operations start. Thirdly, once at the site the buyer must trust that payment and personal integrity is treated appropriately. Here the brand is again playing an important role which is costly for the Airline especially

in the beginning. The Airline's Proprietary Web otherwise cannot expect to get any sales. For the reasons above it sums up to large upfront marketing costs. One advantage is the lower channel cost per sold ticket. Also, since the Airline has direct contact with the buyer it can result in better customer ownership (Grenblad & Rosén, 1999).

All respondents were aware of the difficulties of entering the Airline market and a majority of them believed that there were entry barriers for a new Airline in terms of selling tickets. Even those who answered that there were no entry barriers, mentioned different kinds of aspects that could be seen as barriers:

- Travel Agents choose to cooperate with established actors to limit their own risk of damaging their own brand.
- Limited financial resources. Not only for the flight operations, but also for building the brand. Another aspect for the new Airline to consider is how to establish a credible image so that customers dare to choose the alternative. As a next step a strong brand could also help in creating loyalty among customers and make them return as travelers. A question can be raised about those statements. The jargon in today's popular business jargon includes several words which are in fashion; "brand" is often used in all sorts of contexts. Caution is therefore called for and it is not certain that the brand is the real solution. It could also just be one of those "catch all" solutions perceived among the general public to take care of more things than it actually does.
- Creating appropriate technical system for the selling of tickets. Integration with CRS could be an entry barrier if the initial costs to adjust the technical systems are high in the beginning. When integrating with the CRS system it's not self-evident to get good sales if the company hasn't a well-known brand yet.
- An Airline that has an innovative business model could find that it is difficult to use the CRS-based channels. The CRS:s were created by and for the traditional airlines to support their business models at that time. Legacy IT systems, especially complex ones as the CRS are hard to change. Therefore the new innovative airline might be forced to create its' own proprietary solution for the sales function, such as a Proprietary Web.
- Having sellable products could call for interlining, which in turn is said to require agreements with other Airlines. The standard industry regulations are not covering all aspects.
- Cutting through the noise in the CRS system, i.e. having enough shelf space presence. Large Airlines with many departures between destinations, especially

those with code share, get many listings presented in the CRS system when a search for a ticket is made. One possible entry barrier not mentioned by the respondents is due to the CRS position in the network as discussed above, see chapter 6. Because much of the value resulting from the sales activity is positioned inside the CRS:s in the shape of higher relative profits, it could mean that other actors they get unfavorable terms of the business. If these terms were more diversified among the different actors it could be easier for all the actors operating in the network and especially for new actors trying to enter the industry. More even profit distribution could help the new actor to get the financial resources which have been a problem for all the actors in the beginning.

The network changes found have been involving all the other actors but the CRS:s. What the CRS has done is only to structure their business. The entry of Web Seller has not weakened their position since many of them choose to connect to a CRS. While the other actors in the network are going through large changes since actors in a network depend on each other it is possible that the CRS will be affected eventually and forced to change their process and strategy.

8. Conclusion

In this paper we have found that there are barriers to entry with regards of sales of tickets which fall into three broad groups. First, access to channels is hindered: The Airline's IT system requires adaptation, Travel Agents that distribute the tickets select which Airlines to prioritize, and Airlines might limit the code sharing agreements to a few actors. Second, resources limit sales performance: Financial resources are often limited for a new actor, which means less possibility to create a strong brand and receive necessary attention. Third, network structure impact return of investments: The central position of the CRS in the sales network means a barrier to entry. Much of the value that the sales channels add results in relatively large profits for the CRS. It means that it is difficult for Airlines to internalize this value and get returns on their investments in sales channels. This is at least true for channels using the CRS, which still is common practice even for Proprietary Webs.

9. Future Research

- To get generalizable results on the issues of sales barriers in particular, a survey would be suitable with more actors included and perhaps also more respondents at each actor.
- The industry changes would be interesting to follow with the perspective of markets-as-networks approach. Will structuring take place where use of activities and/or resources is refined to attain better efficiency? Or, will a Heterogenization process happen where new ways of combining resources result in increased effectiveness?
- An area not covered in this paper is about the distribution of tickets that are sold. Similar research could be made on this aspect to see if it could be an entrance barrier, e.g. does e-ticketing make it more easy or difficult for new Airlines? What are the resources needed and what are the difficulties in getting access to them?
- The dominating position of the CRS could be interesting to study and to see if it could affect the entrance of new airlines. So far much of the competitive impact of the CRS:s has been analyzed in relation to the incumbent companies, see for instance the US Department of Trade.
- This paper can be an input and starting point for analysis of competition in the Airline industry and forces limiting competition. Sales and revenues are important factors to a company and this could be a future research question to include in the competitive analysis.

10. References

- Axelsson, B. (1996). *Professionell marknadsföring*. Lund, Sweden: Studentlitteratur.
- Borden, Neil H. *The Concept of the Marketing Mix*. Journal of Advertising Research, June 1964.
- Cook, K. & Emerson (1987), R. M. 1978, Non-Exchange Relationships in Networks. *American Sociological Review*. Vol 43. October, pp 721-39.
- CRTR (2003). *Western European online travel sales double*. At NUA, 2003-05-13
http://www.nua.com/surveys/index.cgi?f=VS&art_id=905358743&rel=true.
- DOT. US Department of Trade, DOT-P-37-88-2.
- Grenblad, D. & Rosén, P. (1999). Internet- A Sales Channel in the Airline Industry. Master Thesis, University of Linköping Electronic Press. ISRN LIU-EKIFEK-D—1999:EP:D/40—SE
- Håkansson, H (1992). Evolution Processes in Industrial Networks. In Axelsson, B & Easton, G. (eds) *Industrial Networks. A New View of Reality*. London, UK: Routledge.
- Håkansson, H. & Snehota, I (1995). *Developing Relationships in Business Networks*. London, UK: Routledge.
- Mattsson, LG (1982). Om utvecklingen av marknadsföring och distributionsekonomi i Sverige. In Brunsson, N (ed) *Företagsekonomi - sanning eller moral? Om det normativa i företagsekonomisk idéutveckling*. Lund, Sweden: Studentlitteratur.
- Netcraft (2003). *The Netcraft Web Server Survey*, 2003-06-13.
http://news.netcraft.com/archives/2003/05/05/may_2003_web_server_survey.html
- Nielsen Netrating (2003). *How Many Online?* At NUA, 2003-06-13.
http://www.nua.com/surveys/how_many_online/index.html
- Van den Ven & Ferry (1980). *Measuring and Assessing Organizations*. New York, USA: Wiley.