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BUSINESS TRANSFORMATION IN THE ALPINE SKI INDUSTRY

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0 Abstract

The alpine ski- and winter sport industry is undergoing an enormous change -a change characterised by consolidation, reconfiguration of value chains, transformation of companies and the industry itself. New business models, based on new forms of linking business activities to new business systems, are emerging. The goal of this paper is to identify the drivers and the direction of business transformation in the ski area industry and thereby to develop a framework for future research and a concept adaptable for different industries to shape future developments by structuring their strategic concepts.

The paper addresses the following questions:

- Which are the main driving forces of transformation in the alpine ski business?
- Which are the most important common trends in transformation?
- Which are success factors of newly configured business models?
- How can business models be structured?

This paper is based on a comprehensive database of North American and Swiss ski resort development. The two markets are not only interesting examples themselves, but also relevant cases, as they represent different levels of evolution. Switzerland is one of the pioneer countries of modern winter sport and ski tourism. North America is one of the later entrants in this business with completely different regulative and social environment. The database consists of statistical information about the whole industry as well as case studies analysing different companies.

Theoretically, the paper is positioned in the field of strategy theory, where most of its theoretical background is derived from.

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1 Introduction

1.1 Rational

Ski and winter sport tourism contributes only a small portion to the world wide income in tourism. In many countries and regions such as Central Western European countries (for example Switzerland, Austria, France, Italy) and also regions in other countries like Colorado in the U.S. or Patagonia in Argentina/Chile, winter sport tourism adds an important part to the regional income. For example in Switzerland, winter sport tourism generates about 17% of the total overnight stays.[1]

Like many tourism segments, as well as most other industries, the alpine winter sport and ski industry is undergoing an enormous change. Low air fares as well as the developments in the information and communications technology lead to a fast globalisation of this industry. Traditionally, for example, people from Great Britain went to the alpine regions for ski holidays. Nowadays there are more charter flights from Great Britain to North America than to the European alpine destinations (for the importance of air traffic connections to the development of long haul destinations see publications in AIEST 1993).

New trends in tourism demand show more interest in and relevance of social and natural experiences (for consumer needs in alpine ski tourism see Weiermair 1996). Therefore a shift of competencies in ski area management can be observed. Traditional technical competencies (how to operate cable cars, how to groom slopes) lost their importance against skills like management of animated places or create atmospheres as well as operation of community based marketing concepts. This change in the importance of strategic resources (e.g. core competencies) had an effect on the optimal management structure and size of ski area companies. Innovation management, research, positioning and development of animated places lead to the need of huge investments in concepts that smaller companies cannot afford anymore. Therefore the industry undergoes a fundamental transformation.

1.2 Goal and methodology

This paper deals with the transformation of the ski and winter sport tourism industry. Its goal is not only to give insights into change and development patterns of ski areas but also to deliver analytical frameworks for the analysis and understanding of change in other industries. Therefore this paper draws on the general theory of transformation and business models and tries to deliver new analytical models. As a kind of industry case study, the paper tries to answer the following questions:

- What are the main driving forces of transformation in the alpine ski business?
- Which are the most important common trends in transformation?
- Which are success factors of newly configured business models?
- How can business models be structured?

[1] Own calculation based on the following considerations: Generally, the mountain destinations generate 38% of all hotel-overnightstays in Switzerland. 56% of those 38% are generated in sommer, therefore about 17% of the total hotel-overnightstays are generated by wintersport-destinations.

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The research method can be characterised as an industry case study approach, that relies where ever possible on industry data, but also on single company case studies, where good examples help to get insight into and characterise developments and mechanisms. The major steps of our research process can be documented by following publications:

Empirical observation of Industry developments: differences between North America and Europe	Bieger 1999, Jahrbuch der Schweizerischen Tourismus-wirtschaft	Empirical experience and theory: networkt effects, consolidation and transforma-tion patterns.
Industry transformation in Service Sector: Transformation of Service Companies and industries	Belz/ Bieger 2000	General theoretical transfor-mation pattern.
Perspectives of cable car companies/ski area industry in Switzerland	Bieger/ Laesser Jahrbuch 2001	From empirical results to theory: structural transforma-tion and new business models in ski area industry.
Business models. Structures and content of this new concept	Bieger et al, erscheint 2002	Theoretical foundation to business model structure.
Concept for public subsidies in ski areas: concept for ministery of economic affairs in Switzerland	Bieger/ Caspar 2002	Requirements and specifica-tion of new business models for cable cars.

For the evaluation of the transformation process in the alpine ski industry, Switzerland is an interesting object for an survey because of

- its relatively restraining tourism policy within free markets (at least by the majority)
- the high economic power of other branches, the strong competition for resources (personnel, land etc.), the force for productivity and therefore the highly developed change of structures within the industry
- its challenging demand and therewith strenghtened pressure to change of structure
- distinctive small and medium sized structure.

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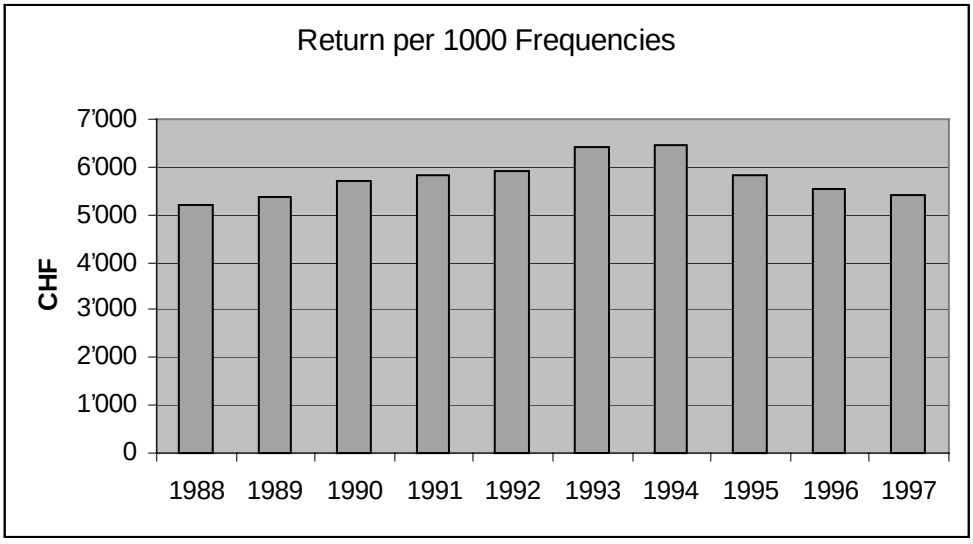
2 Competitive structure of ski and winter sport tourism

Ski and winter sport tourism is challenged by an increasing number of substitution products. Even in alpine countries, theme parks and other forms of leisure activities are being developed. To compete with these new offers, ski areas have to provide a similar form of convenience as well as price competitiveness. This leads to the need of development of new concepts to manage integrated service chains and to take advantage of economies of scale, because international competitors operate in totally different unit sizes.

On the supplier side, a major consolidation leads to an increased pressure on the alpine winter and ski sport industry. For example the suppliers of grooming equipment merged so that currently only three major international suppliers are on the market. The cable care equipment suppliers also underwent a consolidation. Leitner bought french based Poma and the austrian based Doppelmair merged with the swiss based Garaventa company. Therefore just two international suppliers for cable care equipment exist at the moment. The tendency of regulators to delegate safety checks and the development of future security standards (see development within EU, for theoretical effects of industry influence on regulators cp. public choice theory, for example Buchanan/ Musgrave 1999, Bernholz 1993) combined with higher prices due to this consolidation process will lead to higer reinvestment costs.

An increased internal competition (based on an oversupply due to heavy governmental subsidies for regional policies in some European regions (vgl. Bieger et al. 2000) and replacement of old ski lifts with high capacity chair lifts) very often leads to pressure on prices. Data for Switzerland for example shows, that due to oversupply the average return per ski transport declined dramatically from 1994 to 1997 (see Figure 1).

Figure 1 Average Return per Ski Transport

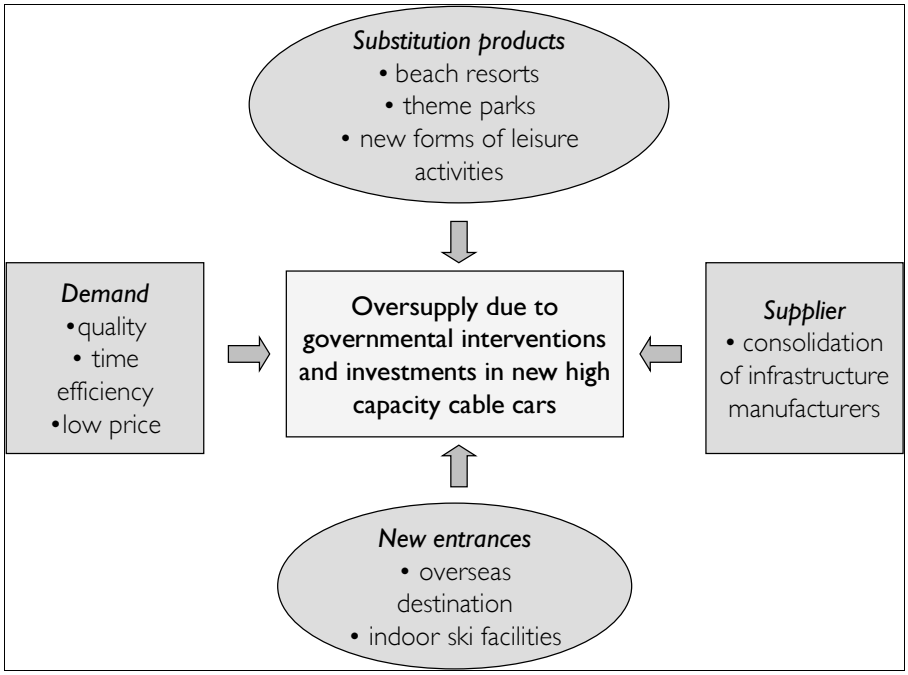


Source: Own calculation upon the data of the swiss federal statistical office

Overall, in the ski industry an increased competition (stemming from all five driving forces of competition mentioned by Porter (see Porter 1996)) can be identified (see Figure 2).

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Figure 2 Competitive forces in ski/winter tourism



Source: own illustration according to Porter 1996, 23

This increased competition met an industry, that was like most other tourism industries dominated by small and medium sized companies. In the United States, the typically small and medium sized "mom and pop" ski areas had been operated by families. In Switzerland, like in most other European countries, cable cars had been privately owned by small shareholder companies. Very often, different groups of citizens in the same village had been engaged in different companies that served the same ski area. In Switzerland these companies typically focused mainly on transport and on providing ski slopes.

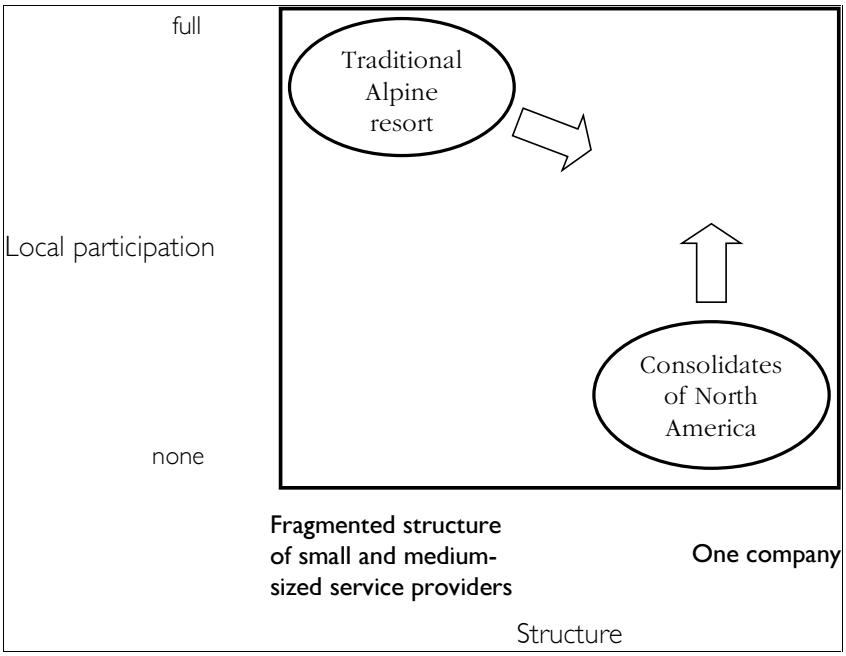
In the United States and many other newly entering countries in the ski- and winter sport area, ski areas had to be developed from scratch. In regions with no village and no citizens, very often a pioneer started to develop an entirely new ski area in the middle of nowhere. The main differences between Alpine and North American ski tourism destinations therefore can be characterised as follows:

- Relevance of social and political influences. European alpine ski areas had been developed in century old mountain villages with a traditional and very often proud population, whereas American ski resorts very often (with exceptions like Aspen) had been developed in uninhabited areas. Ski area companies in Europe get a permission for each single ski lift or other transport infrastructure, whereas in America permits are very often given for the development of whole ski areas within the permitted ski area boundaries. Therefore the influence of the community and the politics in Europe is much stronger than in America. Communities have a strong interest in the survival not only of their ski areas, but very often also of single cable cars. They very often pay subsidies for those in financial trouble. But they also take a major influence in the design of the ski area since every single plant has to be permitted. Very often single particular interests, for example the location of a restaurant of a very influential resident, are deciding factors for the location of a cable car station. In North America only a few publications deal with the growing influence of the citizens in the very often more than twenty year old resorts (cp. Williams/ Lawson 2001; Ap/ Crompton 1998; Lindberg/ Johnson 1997). But the residents try to get attendance for their interests linked to their quality of life like noise protection, real estate prices etc. Companies only recently have to deal with their interests and to find ways of participation.

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A certain convergence of the social influence can be hypothesized (cp. Bieger 1999 and Figure 3).

Figure 3 Convergence tendency in winter sports



Source: Bieger 1999, 36

- Also the ski area industry is much more fragmented in Europe than in North America. Very often ski areas had been developed by locals. Through lack of capital on one hand side and the citizens interest to have an influence on the development on the other hand side, ski areas of traditional mountain resorts very often are operated by a huge number of independent companies. Each of these companies had been dominated by a group of locals: For example Engelberg, a Ski Area in Central Switzerland with 20 cable cars, had been operated by 13 companies. Only since the 70ies outside capital played a major role in the development of ski areas, which led to bigger companies serving a whole ski area.

From these differences two important hypothesis can be defined:

⇨ Hypothesis 1: Compared to North American transformation of the industry there is no major reduction of the number of ski areas in alpine tourism.

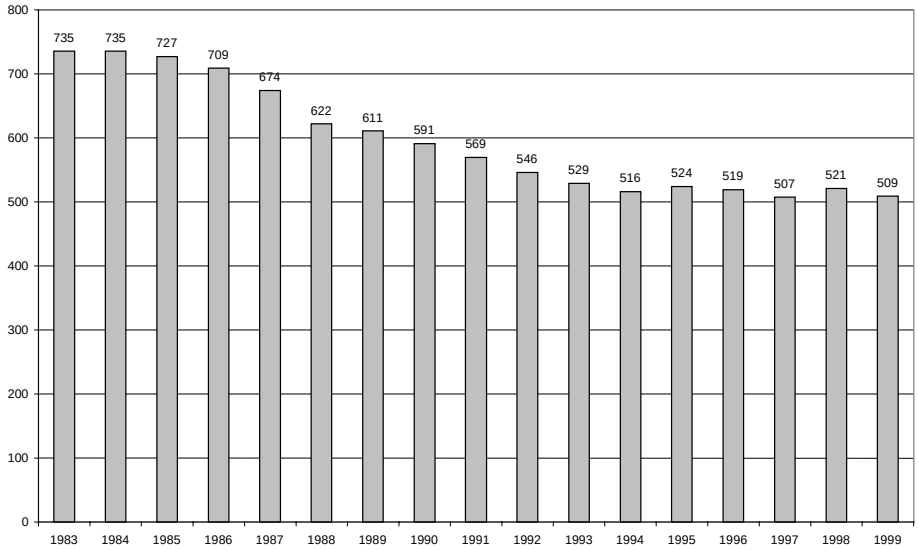
⇨ Hypothesis 2: The average size of cable car companies in the alps is much smaller than in North America.

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3 Structure of the Industry

The number of ski areas in North America went down from 735 to 509 between 1983 and 1999 (see Figure 4). In the same time, the number of ski areas in Switzerland (as explained above Switzerland can be taken as a role model for alpine European ski tourism) stagnated at a level of 220 (source: swiss cable car association).

Figure 4 Development of North American Ski Areas



Source: National Ski Areas Association 1999

The number of new cable cars rose dramatically in North America as well as in Switzerland, but even more in Switzerland. In both countries the replacement of old ski lifts by fast chair lifts played an important role. Nevertheless, it seemed that with an increase of „heavy“ means of transport like chair lifts and cable cars by 3% in Switzerland in 1998 compared to 2.3% in North America, this can be taken as a proof of still ongoing investments in the ski industry despite an existing oversupply.

The average size of a ski area company reached by revenue varies also dramatically. The average size in Switzerland is 4.9 million swiss francs whereas in North America US-Dollar 16.7 million.

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4 Analytical Framework

4.1 Existing research on transformation of ski area and ski tourism transformation

Existing research on ski and winter sport tourism relied very much on descriptive analysis of the development of the number of facilities, demand figures etc. (cp. the roots of industry analysis in Europe for example Pfund 1968 or regular publications of Goeldner 2001 for North America or Bieger et al. 2000; Zegg 2000 or Bieger/Rüegger 1991). A number of publications, not only in scientific journals, drew the attention at the end of the 90ies on the ongoing consolidation process of the industry (cp. Kaplan/ Glick 1996 for North America, Bieger 1998 for Europe). These studies merely focused on the size of the companies and the economies of scale side. On the other hand, there is a rich tradition of literature dealing with customer needs in ski tourism. These studies highlight the need for integrated, customised services or the need for integrated winter sport experiences that consist of more than just mountain transport services and also include shopping or entertainment possibilities (cp. Weiermair 1999). There also exists a rich field of studies dealing with management concepts for different fields like quality management (cp. Müller 2000), suggesting that the industry needs more service and experience specific know how, which leads to an emergence of more specialised competencies.

All in all there don't exist studies yet which integrate the different market specific perspectives, the change of consumer needs, the developments in specific fields of competencies, the structure of the industry, general industry development and transformation patterns and allow to structure today's and future business models for the industry.

4.2 Transformation and business models in general management literature

Transformation of companies and industries is investigated by different managerial disciplines like organisational science (cp. Chandler 1991; Hammer/ Champy 1995, etc.) as well as business strategy (cp. the concepts of resource based strategic views like Prahalad/ Hamel 1990, Penrose 1959) that led to the necessity to reconfigure companies as learning organisations). As common trends of this discussion the following conclusions can be drawn (cp. Sieber 1999):

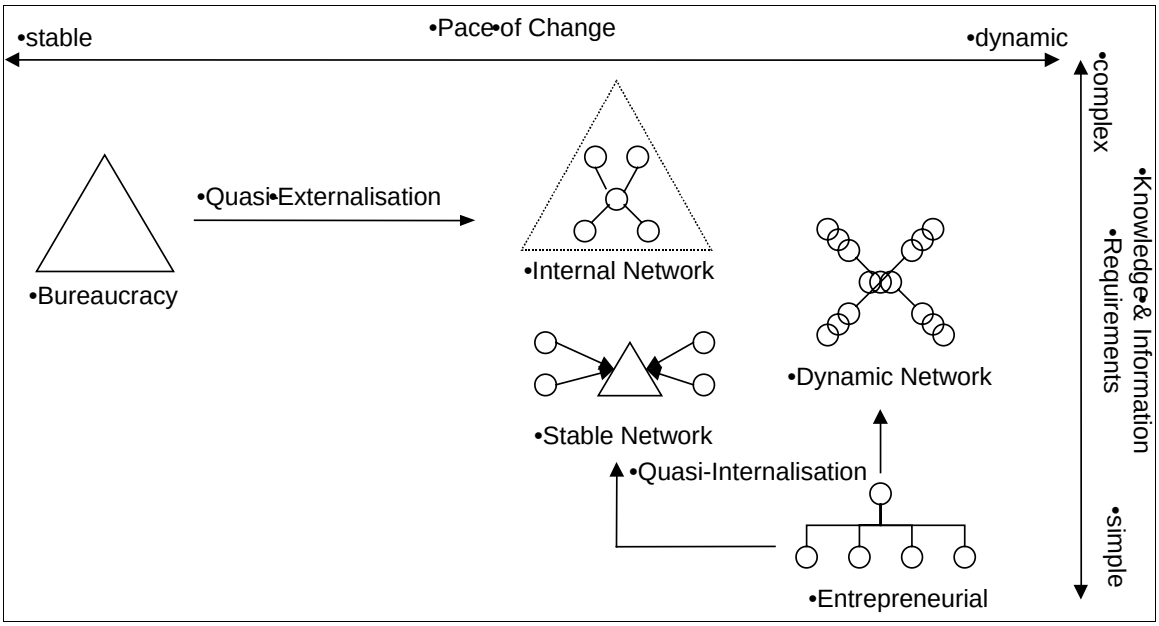
- Starting from the product market position of a company, the relevant activities have to be defined from the set of this activities.
- In a second step, based upon the competences of a company, the own position in the value chain, which means what is performed by the company itself, has to be defined.
- Relevant network partners have to be defined to guarantee the efficient and effective accomplishment of the main activities.
- A governance model for this network has to be defined.

To guarantee an optimum between knowledge and competence development (that can due to internalisation effects best be accomplished by large companies) on one hand side and the need for flexibility and fast adaptation on the other hand side, companies have to develop themselves more and more into network structures (cp. Figure 5). Therefore bigger companies have to develop an ability to adapt to fast changing environment. As they are entering more

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and more fast changing business environments they have to disolve themselves into quite independent business units that are able to adapt faster. On the other hand side independent companies have to come to close cooperation in strong and long lasting links to facilitate competence development.

Figure 5 Development of Company Networks



Source: Sieber 1999, according to Savage, 1996; Miles/ Snow 1992

An integration of organisational and strategic aspects of business development is performed by cybernetic approaches to management (cp. especially Espejo et al. 1996). The focus lies very much on the ability to adapt viability of social systems and communities and therefore also on transformation on learning. Certain conversions of theoretical streams can be postulated as organisational scientists more and more care about flexible organisations with the ability to learn and transform themselves (cp. Osterloh 1996; Schuh/ Millarg/ Göransson 1998) and strategy theorist more and more show interest in strategy process aspects (cp. Hart 1992; Bailey/ Johnson 1992; Mintzberg/ Lampel 1999), to guarantee dynamic competencies and therefore ability to learn. As a common result, theories from all mentioned disciplinary sides postulate constextually suitable configurations of activities in- and outside networks.

In the literature, a growing discussion with focus on customer value can be observed (cp. Pechlaner/ Smeral 2001; Kashyap/ Bojanic 2000; Murphy/ Pritchard 1997). In this customer value debate an important focus lies on community effects (cp. Bieger/ Belz 2000). Through the possibility of interaction with people with a common mind set (in sense of shared values and semantics as well as common behaviour and desires), communities are very powerful. In shaping and implementing corporate images, business to customer communication is more and more substituted by customer to customer communication.

A growing field of literature about network effects suggests that due to increasing marginal returns and decreasing marginal costs through demand side (for example community effects) as well as supply side (for example cost effectiveness economies of scale) network effects lead to a tendency to set prices at marginal costs to allow competitive grows. This behaviour

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erodes prices in core businesses in the tourism sector (for example airline prices or rackrates in hotels) to a level that very often doesn't cover the average costs anymore. Therefore new revenue mechanisms through returns on side products and other forms of new revenue models with innovative price structures between single transaction prices and general access prices have to be developed.

4.3 Network effects and its consequences for cable car companies

Based on the globalisation and the development of the information- and communication-technology, the society is organising itself more and more within networkstructures. Following xamples could in the society and politics could be mentioned:

- Growing international dependance on supranational organisations
- Increasing linkage between government and economy in the context of public private partnerships
- New ways to organize families

All those networks have one thing in common: the network effects (cp. Picot/ Reichwald/ Wigand 2001; Schräder 2000; Duschek/ Sydow 1999). Network effects can be defined as impacts on knots (knot as an element of a network) wich are emerging on the fact, that the knot is integrated in a network and not because of changes of the element (Schräder 2000, p. 79).

Network effects have to be distinguished from the classical economies of scale. Economies of scale are emerging through specialisation and the efficient transaction in bigger production units. This effect only exists in one company and can't be attributed to reciprocity with other elements (cp. Schräder 2000, p. 97).

In connection with network effects, three phenomena are of interest:

- Self-fortification-effect: Through the dependence in networks (in the form of regeneration) self-fortification-effects are emerging, like the simple cycle of economic success: more revenue, higher investment, higher attractivity of offerings, more turnover and therefore more revenue. Such effects only take effect until that point, where elements in the network could act as bottle-neck. In the above mentioned cycle, the market could be exhausted, therefore the higher investment won't lead to higher turnover but to higher depreciation costs and less revenue.
- Density- and variance-effect: Through the entry of a new element to a network, every element in a network has the possibility, to create new connections. Therefore one element can have impacts on other elements connection possibilities (variance effect).
- Net-externalities: Within networks, changes of one element could also affect other, not participating elements. Those effects could be positive or negative. In the facsimile-network for example, through the entry of a new facsimile, all othe network partners are able to benefit trough the new connection, without investing in this connection.

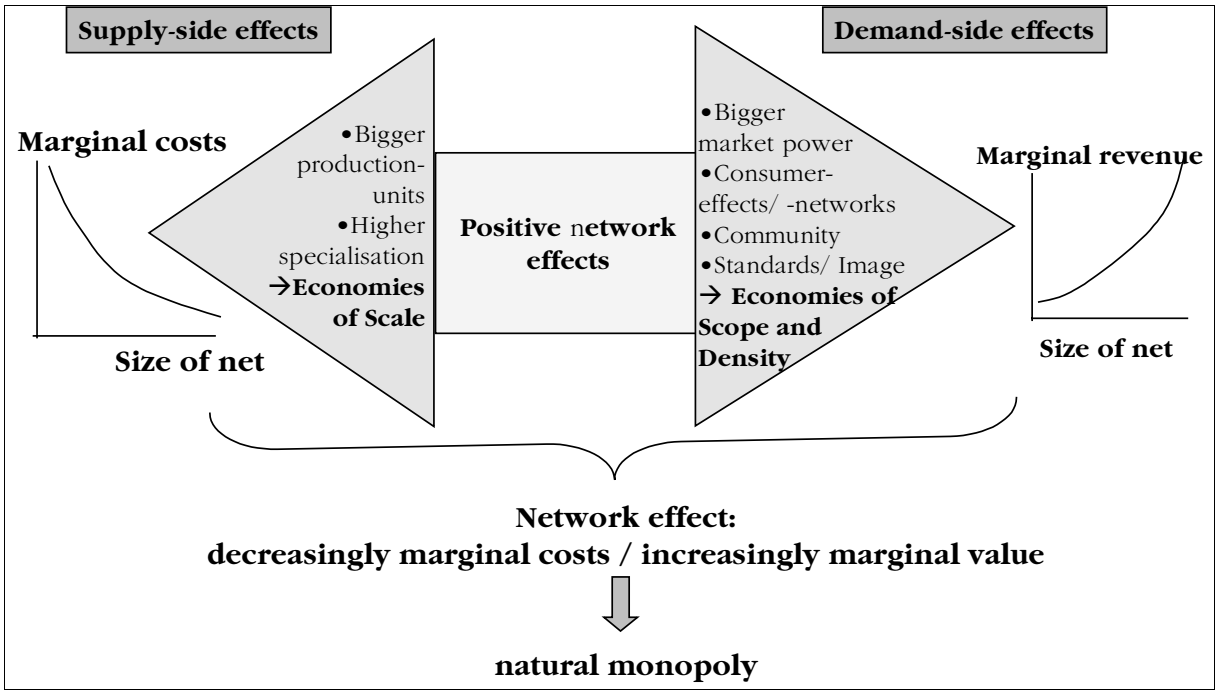
Today in a lot of services, the customers value of a product is depent on the number of co-consumers, which are also using the product (cp. also Shapiro/ Varian 1999 and figure).

In economical networks, supply- and demand-side networks can be identified (cp. also Shapiro/ Varian 1999):

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- Supply-side networks could exist in form of better purchasing conditions opposite to preliminary stages. They lead to decreasing marginal costs, but seem to be limited at a certain level.
- Demand-side networks like communities lead to higher publicity, for example through word-of-mouth propaganda. Market side network effects lead to increasing marginal revenues, which theoretically are not limited.

Figure 6 Network effects



Source: own illustration based on Shapiro/ Varian 1999

Network effects are playing an important role in the cable car industry. Because of the strong internal competition, a lot of cable car companies are trying to generate economies of scale through horizontal integration of other cable car companies or at least some parts of them, for example the grooming vehicles. Through this specialisation and the bigger production units, cable care companies are able reduce their costs.

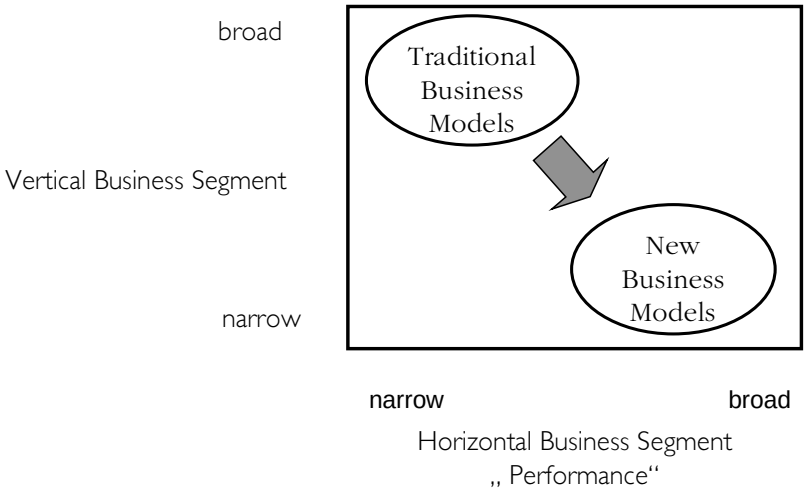
On the other hand, cable car companies are also forced to improve their economies of scope through vertikal integration of non core-business functions (for expample restaurants) or building of communities through events. Based on this vertikal integration, cable car companies are able to internalise auxiliary revenues and therefore increase their cash-flow.

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4.4 Business transformation based on different theories

The above mentioned three important issues of managerial development, the need to reconfigurate companies in supply side networks in organisation theories and business strategy, the need to find new forms of customer communication based on community approaches as well as the need to find new revenue models stemming from the growing influence of network effects lead to the necessity to rethink existing business models. Things have to describe the companies position in a productive supply network. Traditional forms of doing business did focus on single transactions, delivering of a product and pricing that specific product. New business models consist of lasting customer interrelations, delivering systems that allow integrated problem solution or experiences and provide revenue through integrated revenue mechanisms (cp. Figure 7).

Figure 7 Business Transformation



Source: Belz/ Bieger 2000, 523

The term "business models" emerged in the discussion about e-business (cp. Amit/ Zott 2000), but has also been used by non e-industries as a structured approach to describe how this businesses create value added (cp. zu Knyphausen-Aufsess/ Meinhart 2001; Amit/ Zott 2000; Tomczak/ Schögel/ Birkhofer 1999). There are different definitions of business models, for example *"A business model depicts the content, structure, and governance of transactions designed so as to create value through the exploitation of business opportunities"* (cp. Amit/ Zott 2000, 29).

In this article, a business model is defined as the representation of the way, how a company, ist system or a industry creates value (cp. Bieger/ Rüegg-Stürm/ von Rohr 2001, 50).

The different authors define different structures and dimensions to characterise business models. Most of them can be followed back to the above mentioned three dimensions. The company's position in the supply side network, the position and interrelation with the customer and the revenue mechanism.

The concept of business models also can be considered as a further step in the development of strategy theory (cp. zu Knyphausen-Aufsess/ Meinhardt 2001). Business models are the

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strategic planning unit in the network economy (cp. Amit/ Zott 2000). This can be brought in line with the development steps of strategy content theory:

- In the time of outside-in strategies, companies had to find an optimal fit between business environment (Industry structures) and the company's position (cp. for competitive strategies Porter 1980). The relevant planning unit has been the strategic business unit since a company had been able to operate in different markets with different strategic positionings.
- In the inside-out approach (cp. for resource based strategic concepts Penrose 1959, Prahalad/ Hamel 1990). The companies strategic success depended very much on the ability to rely on unique, not transferable sets of strategic resources. The relevant planning unit therefore had to be the company.
- In the network economy the companies create value added in networks. The ability to create these networks, manage them and operate revenue models in this networks is crucial. The relevant planning unit therefore is the business model, which means the set of companies that jointly operate a business model. The company can participate with different parts in different networks. Coopetition (cp. Nalebuff 1996), which stands for cooperating and competing with the same companies at the same time, is the result of these developments.

With these developments the question whether transactions should be organized by markets, hierarchies or cooperations and therefore the transaction cost theories (cp. Williamson/ Masten 1995) did gain in importance.

The above mentioned theories suggest the following transformation of business models:

- Companies review their vertical integration, what means that they disintegrate the vertical value chain. That way the focus lies on those activities where they have sufficient competences and an advanced strategic success position. On the other hand, companies try to integrate different products into problem solving or experience providing product systems. This means that they integrate the horizontal value chain (cp. Figure 7).
- Companies tend do find coordination mechanisms that are the most efficient in the respective field of operation. This means that they are efficient from a transaction economic point of view. Transaction costs increase with an increased risk, increased specifity of goods and merits transacted and the number of transactions (cp. Williamson/ Masten 1995).
- Companies tend to establish stable customer company interactions
- Companies have to relay on integrated revenue models that internalize all the values created by a company directly and indirectly, for example new combinations of fixed "member rates" and prices of goods dealt with.

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5 Transformation of Ski/ Winter sport tourism

From the above mentioned theories, the following hypothesis can be derived:

H1: Ski area companies or cable car companies have to integrate the entire service chain and to provide integrated experiences.

H2: Ski area companies or cable car companies have to extend their revenue models, for example through leveraging the values created through investment in a place or through selling side products.

H3: Since goods or performances transacted in the ski or winter sport tourism industry are very specific and since the risk involved is very high (for example just the climatical risks), integrated ownership coordination-models perform better due to reduced transaction costs.

H4: Owning the customer by operating systems to guarantee long lasting customer relations are followed by the strong and leading companies of the industry.

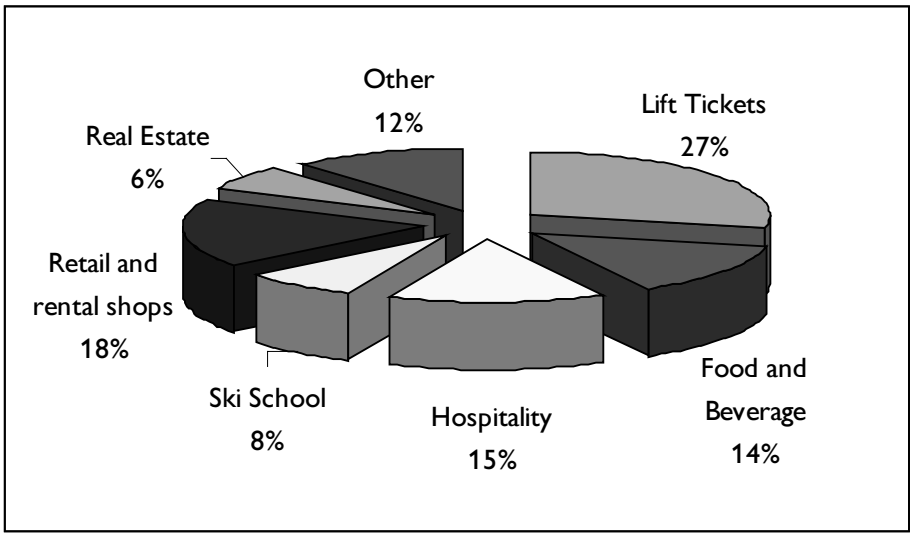
Since we follow a case study approach the data we rely on to discuss these theses stem from single case approaches of single companies as well as industry data as suggested above. Since there are less resistances to change in North America due to the often lacking political influence the developments in North America are considered to be the most market driven.

A special focus has to be given to the performance of the so called consolidates, the listed ski resort companies, since their market value can be defined. World wide there exist four listed ski resort companies: Vail associates, Intrawest, American Skiing Company, Compagnie des Alpes.

Vail Resorts Inc. emerged from the resort company of Vail. During the last ten years another three winter resorts and one summer destination resort had been acquired. The company focuses on the Vail region in Colorado, where their winter resorts are situated. Vail Resorts establishes integrated service chains that include ski rental, ski instruction, accommodation, food and beverage establishments etc. Further more they have been pioneers in developing integrated, animated places on top of the mountains, for example the Adventure Ridge, where they try to provide integrated places of attractions similar to theme parks. The structure of the revenues is as follows (cp. Figure 8).

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Figure 8 Consolidated Operations at Vail Resorts Inc.



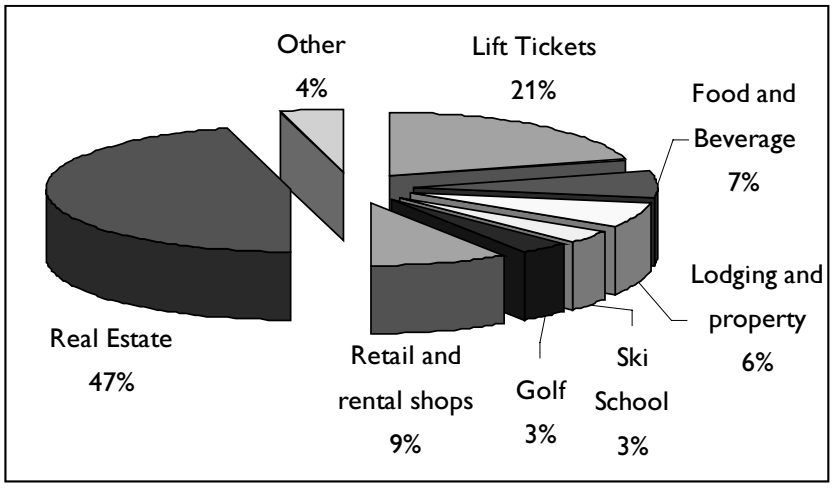
Source: Vail Resorts Inc., Annual Report 2001

The strategy seems to focus more on regional integration through the integration of services and to position the product on a high level as well as to integrate more and more services and entertainment facilities. The share of wallet seems to be on top of the strategic goals.

Intrawest emerged from a real estate company based in British Colombia. They bought their first ski mountain with Whistler Blackcomb in 1986. Following this, Intrawest concentrated on mountain and resort operation. Still the strength lies in the development of ski resorts, so that nowadays they operate two main business lines: development of new resorts and resort operation.

Intrawest now owns 12 resorts spread all over North America as well as a 16.5% share of Compagnie des Alpes in Europe and a 45% share of Canadian Mountain Holidays. Through geographic diversification risk should be reduced, especially metereological risks. The diversification of revenues is shown in Figure 9.

Figure 9 Consolidated Operations at Intrawest



Source: Intrawest, Annual Report 2001

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The growth model consists of the following steps (cp. http://www. intraw-est.com/about/overview/successformula.html):

1. We start with a resort and enhance the experience.

2. Then build an animated village so people stay longer.

3. All this attracts more visitors who come more often, spend more money and bring their friends.

4. More real estate is built and attractions are added, drawing yet more people.

5. More people, more often, leads to the expansion of year-round facilities, maximizing use of shops, hotels, convention facilities and restaurants.

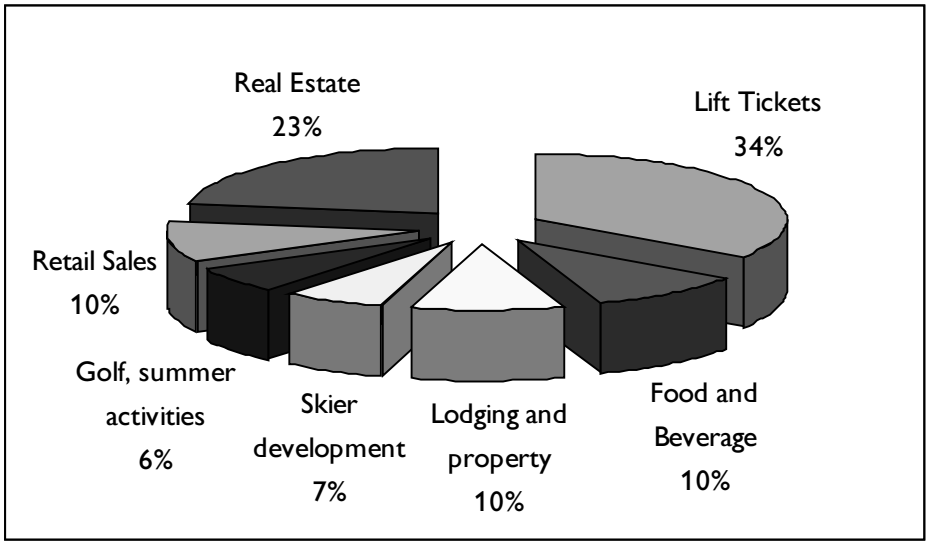
6. As occupancy and room rates climb, so does demand for resort real estate, creating a surge in real estate sales.

7. All this results in a total resort experience which brings year-round destination visitors, generating financial critical mass which...

8. Leads to more resorts. Network synergy results in a compounding effect on the company's revenue streams and growth through time.

American Skiing Company: This company emerged in the consolidation stage of the industry in the early 90-ies. It consists of a patchwork of mainly small and medium ski areas. Growth mechanism consist mainly of buying new ski areas. The structure of the operational revenues is shown in Figure 10.

Figure 10 Consolidated Operations at American Skiing Company



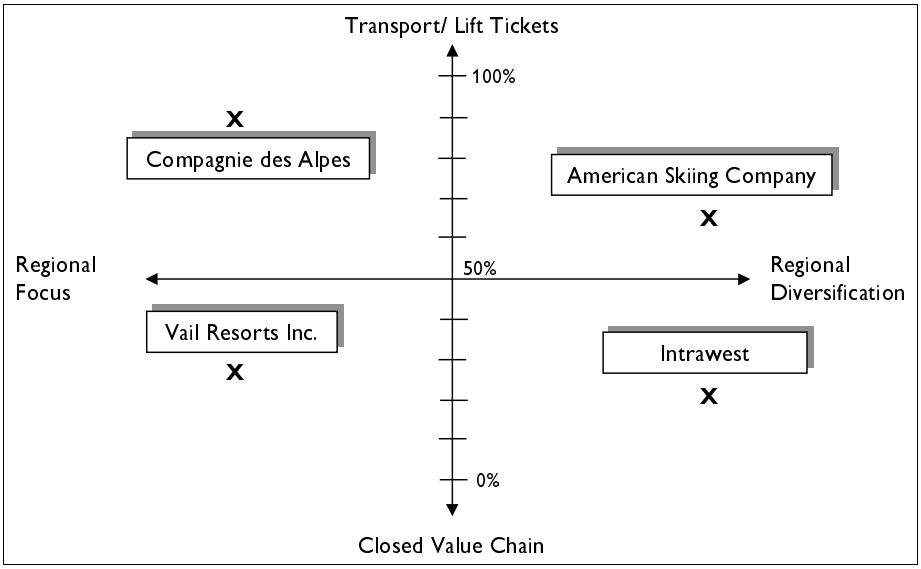
Source: Annual Report American Skiing Company 2001

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Compagnie des Alpes (CDA) was founded in 1981 as a company specializing in ski area management in France. Today CDA's fourteen operating companies maintain and operate some of the largest ski-areas in the French, Swiss and Italian Alps in internationally renown resorts. 90% of CDA's revenues are derived from the sale of lift tickets, but for the past four years CDA has also been actively involved in land development. Through a subsidiary named Les Ski Shop, CDA also operates a network of 31 ski-shops, where CDA intends to grow significantly in the coming years.

The strategic focus of the four companies can be characterised in a matrix with the dimensions geographical focus and business focus. Vail has a narrow geographically focus but its value chain is quite integrated, because they provide all tourism services necessary to make up a tourism service chain. Intrawest's geographical diversification is very strong, whereas its business focus is even broader than Vail's. They also focus very much on leveraging the generated value through real estate. American Skiing Company's geographical focus is quite broad, whereas its business focus is rather narrow. At Compagnie des Alpes, the primary focus also lies on mountain operations, whereas its geographical focus is also very low (cp. Figure 11).

Figure 11 Strategic Focus



Source: own illustration

By taking a look at the p/e-ratios, it can be derived that the capital market values integrative concepts higher than disintegrated concepts, which merely focus on delivering single parts of the service chain like mountain transport. Also regional focus gets a better rating than regional diversification, which can be taken as a indicator for the importance of local competencies and regional concentration of leadership and management resources. Reasons for the higher rating of regionally focused companies could be:

- Superior utilization of synergies (better leadership because of personal interaction and the closeness of the regional companies, easier handling of joint purchasing)
- Unitized pricing policy between the regional companies
- Better knowledge transfer between the regional companies

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Figure 12 P/E-Ratios

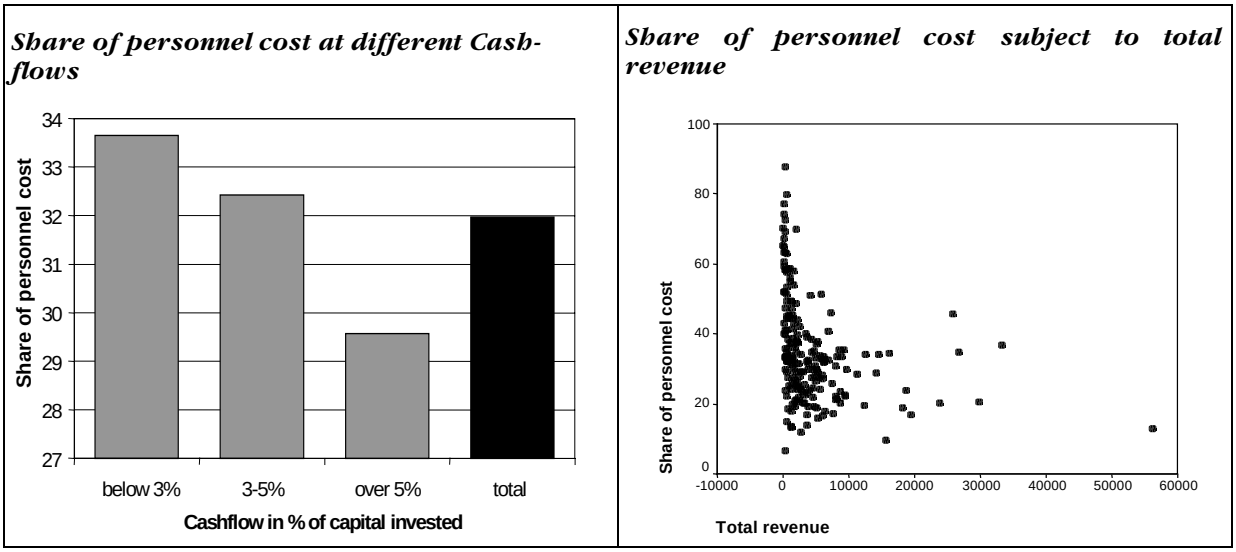
Company	P/E-Ratio 2002
Vail Resorts Inc.	31.41
Intrawest	14.71
Compagnie des Alpes	10.98
American Skiing Company	No earnings

Source: http://www.corporateinformation.com

Comparing the structure of the revenues of Swiss and North American cable car companies, it can be shown that the diversification and the income-bases is much more developed in North America than in Europe. In Switzerland, still 75% of total revenues are gained through the ticket sales, which is still very high compared to the share of lift ticket revenues of the consolidates in North America.

On the cost side, data in Switzerland were available. Following figures show, that just the companies with a cashflow over 5% of the capital invested have personnel costs below 30% of total revenues (no significant but descriptive correlation). With statistic significance it could be shown, that the share of personnel costs is decreasing surpassing with increasing size of companies (in terms of total revenue).

Figure 13 Share of personnel costs in Switzerland

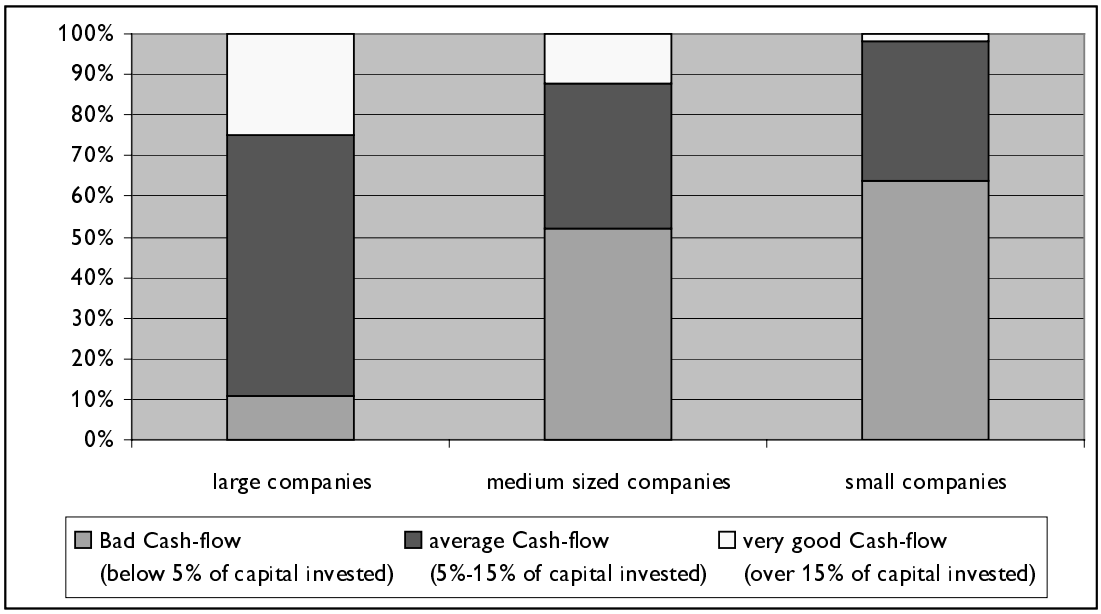


Source: IDT-HSG 2000

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In the case of Switzerland it can also be shown that bigger companies perform better financially (see Figure 14).

Figure 14 Cashflow subject to the size of company



Source: http://www.seilbahnen.org/

The leading company in ski resort business in North America most probably is Vail (see price earning rates Vail). They are very much focusing ont the integration of the service chain and work on the development and improvement of customer service. In Switzerland Laax is considered as the most important and most up-to-date ski resort. Laax just started a new joint venture with the customer relation management company RTC Edwards to improve its customer database and to enable e-services.

Based on this database the above mentioned hypothesis can be discussed as :

H1: In fact, companies tend to increase their share on the overall destination service chain, which seems to be valued by the capital marked.

H2: There are indicators for a disintegration of the vertical service chain (outsourcing of catering, technical service)

H3: It seems that in fact well performing companies have other sources of revenues besides transport which is honoured by the capital market (see case studies of consolidates). The share of non transport income is also bigger in North America than in the alpine regions.

H4: Leading edge emphasize customer interaction and long term customer relation.

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6 Discussion and implications

6.1 Transformation of the ski/winter sport tourism sector

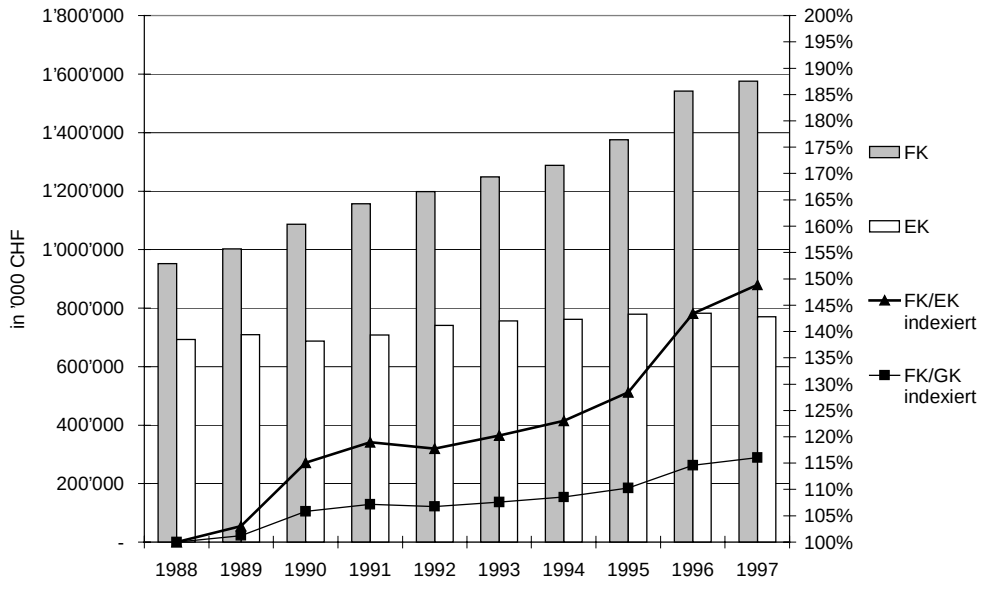
It had been shown that the general implications that could be derived from theory also are truth for the ski transport and winter sport business. Especially the reconfiguration of companies in value nets shown in Figure 5 also is truth for the cable car and mountain transport sector. Companies more and more integrate the whole service chain (horizontal integration) whereas they review their vertical integration by more and more outsourcing non core business activities like grooming and renovation. The movement on the horizontal dimension is far stronger than on the vertical dimension. This means that maybe because of the importance of local considerations and lack of appropriate outsourcing partners. The redefinition of the companies position on the vertical value chain has not gone as far as it could be expected. This means that there is still much room to redefine the ski and winter sport business through employing specialists for different activities like ski rental or grooming.

6.2 Business models – conclusions for the private sector

According to the structure developed above, there can be two main business models identified in the sector of cable car and mountain transport (see Figure 7). There seems to be a strong transformation that goes in the direction of the stilisised North American version. This transformation also takes place within United States, for example how consolidates work when they take over a new resort (cp. business model of Intrawest).

The main drivers behind this development in both continents is the capital market. Only the form of financing is different. In Switzerland like in many alpine countries the traditional bank credits are the overwhelming type of financing (see Figure 15).

Figure 15 Development of dept at swiss cable car companies



Source: Own calculation upon the data of the swiss federal statistical office

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During the last years the average share of credits financing even increased due to major investments. Through the views of a new rating tool the banks enforce strategic changes. There is a shift from guaranting lones based on a some invested to granting lones based on company value measured in discounted future free cash flows. Because many companies don't proof to have sufficiant company value banks force them into new business units. In the United States major capital private equity or stock market financing are dominating. There the private and institutional investors enforce business models because successful business models have better price earning ratios and get capital at a cheaper way.

6.3 Conclusions for State/ Government

On one hand side, the government should encourage the economy, to invest in winter sport tourism, but on the otherr hand side, there should not be subsidies from the state. Therefore following criterias could be set up:

- Public funds have to be sustainable from the economic, the ecological and social point of view.
- Before public funds are spoken, the residents dependence from tourism has to be analyzed. If the residents or not dependant from tourism, no subsidies should be spoken from the regional economy point of view.
- A company should only get public funds once, afterwards the company should be able to survive itself. Generrally there should be no subsidies to companies with an cashflow below 3% of capital invested.

6.4 Further research

Transformation of business models in tourism has to be a important field of research in future. Because of the importance of many forms of tourism for regions and whole countries and because changes and especially transformation in the tourism sector effect this regions and countries heavily. The direction of the transformation has to be identified early and the ability to transform of the single companies and organisations have to be improved and therefore the driving forces and enabling factors like education, access to new market know how etc. have to be strengthen. Therefore from as well as from a business strategy point of view as well as from an tourism policy view, further research has to be conducted on :

- Dimension and direction of transformation of different forms of tourism
- Transformation patterns
- Possibilities to strengthen enabling factors
- The role of the government in this transformation process

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