Incompatibilities of the low-cost and full-service business models within the same airline grouping

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Abstract

This paper examines the strategy of setting up a low-cost unit adopted by some incumbent airlines to the threat and opportunity of the low cost incursion. Based on the analysis of five case studies in the European airline industry, the author explores in detail the chances and risks of establishing a low-cost carrier within the same grouping of a network carrier business model. The results show that incompatibilities of the two business models are the causal reason for failure of earlier attempts. A set of propositions is developed that contribute to the discussion of how to control these incompatibilities.

Keywords

Airline business models – Vertical market extension – Low-cost unit – Incompatibilities

1. Introduction

In recent times, incumbent companies in the service sector, especially in transport industries, are vertically extending existing markets by setting up a low-cost business model beside, while continuing with the operation of the full-service business model. The first one is supposed to serve a price-sensitive market segment, whereas the latter is thought to continuously satisfy the needs of service-orientated customers. This additional downmarket movement is basically intending to defend market shares against increased competition, to enable growth opportunities, and to respond to changing consumer behaviour. However, the simultaneous operation of different business models in the same market leads to several severe conflicts resulting in a decrease of corporate values instead of a planned increase.

This phenomenon could be observed in particular in the airline industry. Many attempts to set up a no-frills low-cost carrier as an internal unit or subsidiary of a full-service network carrier have failed, in particular in the US airline industry. One of the most prominent examples was the effort of Continental Airlines in establishing its low-cost spin-off Continental Lite. In 1994, Continental Airlines suffered from a monthly loss of nearly $55mio, of which up to 70% could be attributed to the operations of Continental Lite (Bethune and Huler, 1998). Moreover, the idea of running two different and actually conflicting airline business models simultaneously resulted in poor quality, dissatisfied customers, and discouraged employees (Porter, 1996). The move nearly drove the parent company into bankruptcy, which had been prevented only by the US law Chapter 11 protection clause. The endeavour was soon abolished, and the activities of Continental Lite were reintegrated into Continental Airlines.

In the mid- and late nineties, other airlines in North America and in Europe followed the example, but most attempts to set up an internal low-cost carrier failed again. Despite these experiences, the airline incumbents in Europe and Asia are in recent times increasingly adopting low-cost strategies in addition to their premium services, while setting up a parallel no-frills business model. Interestingly, some of the major US American network carriers, which already have made their experiences with this strategy before, are re-implementing the same idea. Table 1 gives an overview of closed down, active, and planned low-cost units of incumbent airlines which also operate the business model of a full-service network carrier.

1.1 Purpose of the study

The high number of attempts underlines the spread of this strategy in the airline industry as one of the options for the incumbents to participate in the market for budget air travel, and to react to the growth of the low-cost carriers.[1] The author assumes that the management of these airlines is not completely aware of the negative impacts and the reasons behind these, and hypothesises that incompatibilities of the business models are the causal reason for failure. However, it is believed that there are ways to control and ease the implementation of such a strategy. The author speculates that these ways depend considerably on the configuration of the low-cost unit, its organisational set up, and the way it is arranged in relationship to the network carrier business model.

In order to fully understand the rationale for the incumbent airlines, this paper first highlights the motives for setting up a parallel low-cost carrier. Researchers need to understand the economic logic for a company to condone the operation of several business models with the same basic output inside the organisation boundary. After all, this appears to run counter to the traditional logic of efficiency (Williamson, 1991).

Secondly, the goal of this study is to discuss the incompatibilities in operating the business model of the no-frills low-cost carrier and full-service network carrier simultaneously. When talking about incompatibilities of the business models, the author refers to any inconsistencies or the missing fit of strategic positions from which negative impacts arise, and where it becomes necessary to make trade-offs (Porter, 1980, 1996).

Finally, the objective of this study is to develop a set of propositions following Contingency Theory (Donaldson, 2001), under which the negative impacts can be controlled in such a way that the overall benefits are higher than the costs. It is believed that incompatible positions and the resulting negative impacts arise automatically, when a company operates two business models simultaneously, which are turning out the same basic output. The author, however, assumes that the number and extent of these incompatibilities can be minimised, depending on the configuration of the grouping.

[1] The competitive response of operating various business models within the same grouping or holding company simultaneously, based on a low-cost / full-service combination, and delivering the same basic output, has also been applied in other industries, such as in the retailing, car rental, banking, insurance, news, power supplying, tour operator, consulting and airport business. In some of these industries, this strategy could be implemented successfully.

Table 1 Closed down, active and planned low-cost units of incumbent airlines

Closed down		Active		Planned	
Low-cost unit	**Airline group**	**Low-cost unit**	**Airline group**	**Low-cost unit**	**Airline group**
buzz	KLM	Song	Delta Air Lines	Jetstar Asia	Qantas Airways
Go	British Airways	Zip, “Tango”	Air Canada	SAS Braathens	SAS
Lufthansa Expr.	Lufthansa	Ted	United Airlines	“SAS Economy”	SAS
Shuttle by United	United Airlines	Germanwings	Lufthansa/ Eurowings	flynordic	Finnair/ Nordic Airlink
Delta Express	Delta Air Lines	Snowflake	SAS	Smart Wings	CSA
Metro Jet	US Airways	Bmibaby	British Midland	Nice Jet	Air France
Continental Lite	Continental Airlines	Transavia (Basiq Air)	KLM	Virgin Express	SN Brussels Airlines
People Express	Frontier Airlines	“Swiss in Europe”	Swiss	Centralwings	LOT
		“AUA Bratislava”	Austrian Airlines	Air India Expr.	Air India
		“Fare 4U”	Air Malta	Indian Airlines	Alliance Air
		Hapag-Lloyd-Express	TUI/ Hapag-Lloyd		
		Thomson Fly	TUI/Britannia		
		Freedom Air	Air New Zealand		
		“Express Class”	Air New Zealand		
		Australian Airlines	Qantas Airways		
		Jetstar	Qantas Airways		
		JAL Express	Japan Airlines		
		Nok Air	Thai Airways		
		Tiger Airways	Singapore Airlines		

Source: own research, standings: November 2004, The low-cost units in quotation marks are not separate legal entities nor independent organizations but within-low-cost carrier business models

2. Conceptual background

On the one side, the conceptual background of this study is given by Evolutionary Theory and the theory of Economies of Scope and Scale, discussing the rationale for companies to set up and operate various business models with the same basic output within the same grouping. On the other side, the theory of Generic Strategies and the Concept of Business Modelling offer insights into the incompatibilities and why such endeavours are doomed to fail, if certain rules are not observed.

2.1 Evolutionary Theory

Researchers dealing with Evolutionary Theory are looking at evolutionary processes within organisations. They observe an ongoing process of adjustment and change inside organisations that is driven both by economic and social imperatives. Reasons for these changes can be either exogenous factors, such as changes in the market and in technology, or endogenous factors, such as an organisational structure that encourages autonomous strategic behaviour by business units. In all cases, the organisation allows internal variations to emerge and through a "Darwinian process" the fittest are selected and retained, while the less fit are terminated (Campbell, 1965; Burgelman, 1983).

Referring to the internal dynamics of organisation change, Burgelman (1991) viewed the organisation as an ecology of strategic initiatives which compete for limited organisational resources to increase their relative importance within the organisation. If an organisation encourages autonomous strategic behaviour, business units frequently end up with overlapping product and activities because of their high level of autonomy (Galunic and Eisenhardt, 2001). Competing activities and a competing behaviour of organisational units are sometimes intended to ensure that market opportunities are taken up and to increase the chances for sustainable technological innovations (Lovas and Ghoshal, 2000; Birkinshaw, 2001).

Nadler and Tushman (1999), and Eisenhardt and Galunic (2000) added to the discussion how to design an organisation structure of large multi-business firms that competitive innovations are enabled. Their findings are also applicable to internal organisation issues in dynamic environments. Any changes in the market, such as market deregulation or changes in consumer behaviour, or any disruptive technologies increase the need for organisations to adapt. Typically, firms responding to technological threats or disruptive strategic innovations react in developing a new business unit, thus embracing the disruptive innovation.[2] Again, the existing and the newly founded divisions could end up competing with one another, as two similar games are played simultaneously.

2.2 Economies of Scope and Scale

The other logic why several business units are founded offering similar products is centred around the theory of Economies of Scope and Scale.[3] Certain markets are sufficiently heterogeneous that they allow distinct offerings for different segments. Product variety ensures that each product gets closer to the segment's ideal set of attributes (Sorenson, 2000). Firms respond to this demand by creating business units with overlapping activities and offerings. This increases the revenue potential by better satisfying customers' needs and by enabling growth opportunities (Christensen et al., 2002). At the same time, costs can be reduced through the sharing and transferring of resources between units (Nayyar, 1993), or by the realisation of higher batch sizes in production (Chandler, 1990).

These are the benefits of closely positioning activities and product offerings. However, there are also additional costs in doing this, depending on the characteristics of the products or services and the market in question (Moorthy and Png, 1992). They range from cannibalisation, to the cost of duplication, and strategic incoherence (Mason and Milne, 1994). Overall, the costs and benefits of overlapping activities and product offerings have to be carefully balanced against one another (Markides, 1999; Birkinshaw, 2001).

2.3 Generic Strategies

Porter started to address the issue of incompatible strategic positions in 1980. He defines strategy as the creation of a unique and valuable position, involving a different set of activities. For him, the generic strategies of either cost leadership, differentiation, or focus can be adopted as the alternative directions of the strategy process in order to attain a competitive advantage (Porter 1980, 1996). A company has to decide which strategic position it wants to adopt. The positions can not be combined in one grouping, because each generic strategy

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[2] Markides (1997) defines a strategic innovation as a new and fundamentally different way of competing in an existing industry. A disruptive strategic innovation is one that conflicts with the traditional way of playing the game (Charitou / Markides, 2003).

[3] Economies of Scope are achieved by reducing cost through the sharing of certain activities across two or more products or units of production (Teece, 1980; Panzar / Willig, 1981). Economies of Scale are attained by reducing unit cost with increased volume (Chandler, 1990).

requires a different set of resources and capabilities, as well as different organisational structures, control, and incentive mechanisms. These requirements also lead to different management styles and corporate cultures, and highlight the need to choose, in order to avoid becoming caught between the inherent contradictions of different strategies (Porter, 1980). Trade-offs between the activities of incompatible strategic positions explain those contradictions. They arise for three reasons: The first is inconsistencies in image and reputation. Secondly, and more important, trade-offs come up from the activities themselves and finally, trade-offs occur from limits on internal coordination and control (Porter, 1996).

2.4 Business Modelling

The concept of Business Modelling offers a new perspective to the discussion about the Strategic Business Field (Abell, 1980). As corporate networks become more important, and companies or individual products are no longer capable of explaining economic success, a new analysis and action unit must be created (Bieger et al., 2002a). This unit has to take into consideration the value drivers constituted by corporate networks and their economics, and demands the description of the configuration of activities and the mechanism of returns even across the boundaries of a company (Amit and Zott, 2001). In recent years, this unit of analysis and action has been called “business model”. Simplified, it can be defined as the way of how a company, corporate system, or industry creates value on a market (Bieger et al., 2002a).

According to Knyphausen-Aufseß and Meinhardt (2002), the elements of a business model are constituted by the execution and configuration of the activities of the value chain, by the mechanism of generating returns, and by the combination of products offered and markets served. This strategically orientated definition also separates the term business model from a corporate system which offers only various brands and/or products. In these cases, only the combination of products offered and markets served differ but not the configuration of the value chain nor the mechanism of returns.[4] A more operational approach has been taken by Bieger et al. (2002a), who identify and describe eight dimensions of a business model, shown in table 2 exemplarily.

In the airline industry, five different business models can be identified (Bieger et al., 2002b; Graf, 2003). Though the basic output of these business models is the same – the transportation of passengers between two destinations – they differ in the configuration of the value chain,

[4] Industries which have applied this strategy of distinctive offerings by developing different brands and products range from hotels, textile, tour operators, copying machines, consumer goods, mobile phones, and automobiles.

and in the way of how they create value on the market place. Thus, they are also different in their main strategic success factors. Table 2 describes the distinctive characteristics of the network and low-cost carrier in comparison, applying the business modelling approach of Bieger et al. (2002a). Other airline business models are the charter, regional, and business executive carrier with different success factors, respectively.

Table 2 Distinction between the network and low-cost carrier business model

	Network Carrier	**Low-Cost Carrier**
What benefit for what customers? ***Product/ service concept***	• **Comprehensive and differentiated offer** a) high number of daily flights and destinations worldwide b) global network with connections c) several products for numerous customers segments (two or more transport classes) d) several service amenities included (baggage transfer, seat assignment, seat comfort, free catering, primary airports, special services, various distribution channels, loyalty program) • **Several customer segments addressed** a) focusing on business and high yield passengers b) appealing to service-orientated passengers b) approaching also leisure and price sensitive passengers to increase revenues	• **Selective and simple offer** a) limited number of daily flights and destinations b) focused point-to-point relations c) simple and single product offer for one customer segment (only one transport class) d) no-frills service (no baggage transfer, no seat assignment, limited seat comfort, catering against payment, secondary airports, no special services, only direct distribution, no loyalty program) • **Only one customer segment addressed** a) focusing on leisure and low yield passengers b) appealing to price-sensitive passengers c) approaching also business passengers to increase revenues and yields
How is this benefit communicatively anchored in the relevant market? ***Communication concept***	• **Complex communication system** a) sophisticated brand management b) emphasising communication on service amenities and product offer c) key account management for important customers d) committing customers and agencies by loyalty programs	• **Simple communication system** a) selective presence through classic brand awareness advertising in the relevant geographical markets b) emphasising communication on prices c) focus on IT and “below the line” marketing d) no key account management
How are the revenues generated? ***Revenue concept***	• **Complex pricing system** a) price differentiation highly important to exploit customers’ readiness to pay b) complicated fare system with high number of fares at a time c) usually return-trip pricing d) complex revenue management e) increasing revenues by focusing on yields • **Basically one single source of revenues** a) ticket sales as one and only return	• **Simple pricing system** a) prices differentiated only by time of booking and strength of demand b) simple and transparent fare system, only one fare at a time c) usually one-way pricing d) simple revenue management e) increasing revenues by focusing on volumes • **Various sources of revenues** a) direct marketing as a source of return b) airports as a customer rather than a supplier c) on-board sales of some service amenities (catering)

What growth concept is pursued? ***Growth concept***	• **Hybrid growth concept** a) evolutionary and revolutionary growth pursued (organic or by acquisitions and alliances) b) diversification • **Focus on market shares** a) Expensive fight about market shares above marginal costs	• **Simple growth concept** a) simple multiplication model of opening the next route or base, when the budget is achieved b) reduction of complexity through separation of a business unit • **Focus on efficiency gains** a) growth important to improve sourcing conditions (e.g. for capital, fees, prices)
What core competencies are necessary? ***Competence configuration***	• **Network management** a) global connections • **Revenue management** • **Product offer and its quality** • **Marketing and CRM**	• **Market presence** a) underlining low-price reputation • **Process and cost management** a) increase efficiency where possible (high utilisation rate, standardised processes and fleet)
What are typical features of the organisation? ***Organisational form***	• **Complex organisation** a) to realise comprehensive offering b) centred around core competencies • **Out-sourcing of operations** a) less of services but more of flight operations • **Static corporate culture** a) values addicted to tradition and services b) leadership with hierarchies	• **Simple organisation** a) to maintain low costs b) centred around flight operations • **Out-sourcing of services** a) less of flight operations but more of services • **Dynamic corporate culture** a) value addicted to efficiency b) supporting integrity, initiative and non-monetary benefits c) leadership without hierarchies
What cooperation partners are selected? ***Cooperation concept***	• **Extensive horizontal cooperations** a) to complement global flight offering • **Extensive vertical cooperations** a) to improve services and offering (e.g. ground handling) b) to improve distribution and offering (e.g. with travel agents and CRS providers) • **Complex linkages**	• **Restricted horizontal cooperations** a) focusing on mutual sales activities • **Some vertical cooperations** a) with hotels and car rentals to generate marketing provisions b) with airports to generate traffic commissions • **Simple linkages**
What coordination model in networks is used? ***Coordination concept***	• **Application of various and complex models** a) alliances, capital arrangements or franchise agreements	• **Application of one single and simple model** a) explicit contracts with suppliers and revenue partners

Source: own presentation based on the operational business modelling approach of Bieger et al. (2002a)

3. Research design and methodology

As the research issue of this study is still quite unexplored, and only a limited number of examples in the airline industry can be found, the author decided to pursue an inductive and qualitative research approach. The case study analysis was selected as the best method to gain deep insights into the underlying relationships between the business models. The advantage of this research method is that the phenomenon can be analysed in real time and at multiple levels. Case studies do not rely on previous literature nor prior empirical evidence (Eisenhardt, 1989; Yin, 1994). This research approach will help – both by description and by exploration – to develop insights into the incompatibilities of business models in the same grouping, and will derive suggestions to overcome these deficiencies.

With the aim of increasing the evidence of this study, and achieving more rigorous results, multiple cases have been studied. In total, five cases in the European airline industry have been selected for analysis: 1. British Airways and Go, 2. KLM and Buzz , 3. KLM and Basiq Air, 4. Lufthansa and Germanwings, and 5. Swiss and "Swiss in Europe". These cases include both failed and still active examples of low-cost units of major network carriers, and differ significantly in their configuration. Both, the status of the low-cost unit, and its configuration have been the main criteria for selection.

In order to support the triangulation of data and methods, the author gathered information from both primary and secondary sources. The primary sources included 24 semi-structured interviews with company representatives at all levels and areas of the organisations as well as with some external consultants who were believed to know the cases very well. The interviewees have been selected and addressed due to their function and responsibility with the cases. Table 3 gives an overview of their association with the analysed cases. Fifty percent were working for the parent company, and fifty percent for the low-cost carrier unit. Apart from the 19 top-level airline executives and the three consultants, two experts from the car rental and power supplying industries have been interviewed to complete the insights from the airline industry. In these industries, additional business models have been established to serve price-sensitive customers.

The data collection process started in September 2003 with individual 1-hour to 1.5-hour personal interviews, these were completed by March 2004. The author effected all interviews with the help of a standard set of interview questions. The investigation was conducted out of the management perspective involving several areas. It was assumed that management has the best overview of all issues, including issues concerning the negative impacts and incompatibilities on the customers', employees' and partner level.

At a second stage of data collection, the insights of all interviews were summarised in a questionnaire with closed questions, and were presented in writing to the same group of interviewees. The author asked all experts to rate the significance of the listed chances and risks of operating the two business models simultaneously for the corresponding case. For this purpose, a four-point Likert scale was used, ranging from “is not true” (=0) to “is fully true” (=3). The rationale for developing this questionnaire has been first verification of the results from the semi-structured interviews, and secondly, the possibility of a systematic comparison of the findings for all cases.

Aside from the primary sources of data collection, secondary sources were consulted to gather background information about the cases. Such sources included annual reports, internal documents, and news clippings.

Table 3 Interviewees and their association within the analysed cases

Function of interviewees	**Number of interviewees consulted**
Chief Executive Officer	2
VP Network Planning	2
VP Marketing	3
VP Strategy	4
VP Sales	2
Head of Strategy	5
Head of CRM	1
Head of Sales Division	2
Senior Consultants	3

Source: own presentation

4. Analysis and discussion of findings

4.1 The analysed cases

Go

Go was founded in 1998 as a separate entity but as a one-hundred-percent subsidiary of British Airways (BA). It started operations at Stansted airport, situated in the north of London, and opened up a second base in Bristol in May 2001, operating up to 15 aircraft at that time when it was still in affiliation with BA. Moreover, it was intended to inaugurate East Midlands as a third base in May 2002, with plans to operate up to 45 aircraft in total. Before BA launched its low-cost carrier subsidiary, it held talks with Ryanair about a possible investment in the Irish low-cost carrier. As indicated by the chosen name of the carrier, a separate brand was created. However, the close relationship with BA was underlined by Go, also been promoted as being "the low-cost airline from British Airways". In regard to the destinations chosen, Go was flying to markets where BA was also operating, the difference being that the latter was flying out of London-Heathrow or London-Gatwick. Though being designed to address the leisure segment, Go also directly approached passengers flying for business purposes by having established a key account management for corporate customers.

The organisation of Go was set up as a completely separated team, working in offices at Stansted airport, disconnected from the organisation of BA. The parent company merely performed central functions as the safety supervision, cabin crew selection and training and revenue accounting. Overall, the organisation of Go was autonomous in deciding about any issues in production and network planning, distribution, purchasing, organisation, human resources, product design but not regarding investments. Go also established its own corporate culture, independently to the one of BA. But by intention of BA, the company was unionised with one single union selected and responsible for all unionised employees. Considering its product, Go was established as a low-cost carrier that also presented service features of a differentiated premium carrier, such as a higher number of daily flights, serving primary airports, and offering a fancy design. Commenting on the low-cost carrier's performance, Go lost £20mio in each of its first two years, but it was moving into profit for the third year of operation. Nevertheless, in 2001, BA decided to sell Go, and accepted a management buy-out proposal supported by the venture capitalist 3i. The deal was worth £100mio. Prior to that, KLM made a bid for acquiring and then merging Go with buzz. One year later, easyJet acquired and integrated Go into its operations, while it paid four times as much as 3i.

Buzz

Buzz started flying in January 2000. Following intense pricing competition by other low-cost carriers in London-Stansted, KLM UK decided to transform some of its operations into the low-cost carrier business model. Buzz was barely a brand with the corporate entity of KLM UK behind. The latter firm was a subsidiary of KLM, bought as Air UK in the nineties to feed the hub in Amsterdam out of Great Britain, and to benefit from domestic earnings in the United Kingdom. KLM UK assigned a rather unfavourable fleet for low-cost operations of two types and 10 aircraft to the activities of Buzz. Under the new brand and business model, Buzz operated mostly on the same routes that were previously flown by KLM UK, which are however not corresponding with routes of KLM. These destinations comprised markets for passengers travelling both for business and for leisure reasons. Thus, Buzz was also equipped with a more precious low-cost product, flying to primary airports abroad, and using the best airport facilities available. Additionally, Buzz was in charge of the operation of the Stansted-Amsterdam feeder route on behalf of KLM UK and KLM. For these flights, a separate ground and in-flight product was offered which more resembled the full-service product of KLM. Meals had to be served, frequent-flyer points to be awarded and uniforms and cabin styling to be changed.

While also having directly addressed corporate customers by a key account management, Buzz stressed the affiliation with KLM UK and KLM. The organisation of Buzz consisted of a separate team, working closely together with the overhead of KLM UK. It established its own corporate culture which, however, was influenced by the close relationship with KLM UK. Its autonomy towards KLM UK was restricted both in terms of investments and in production and network planning. Additionally, it has also been influenced by the ideas of KLM. In October 2002, Buzz announced to open a second base in Bournemouth and to establish another base in the UK as well as one on the European continent later on. At that time, it was also intended to merge the activities of Buzz with the low-fare brand Basiq Air of Transavia, another subsidiary of KLM, and to establish Buzz as an independent enterprise within the KLM group. However, the board of KLM stopped this idea only three months later. Instead, it sold the activities of Buzz for a total of EUR 20.1mio plus the protection of intangible assets, such as airport slots, to the low-cost carrier Ryanair, while the rest of the activities of KLM UK were integrated into KLM Cityhopper. In those days, Buzz was losing over EUR 1mio a week with its operations.

Basiq Air

Basiq Air is again not an own operator or corporate entity but just a product label with offerings following the low-cost carrier business model. In December 2000, its operations have grown out of Transavia, the subsidiary and charter carrier of the KLM. Apart from selling both capacity to tour operators and seats directly to individual passengers, Transavia started with scheduled flights in connection with KLM services in the nineties. In the meanwhile, these services have been abolished and substituted by flights labelled with the Basiq Air brand and based on the low-cost carrier business model. However, aircraft are flying in the colours of Transavia. In these days, the double branding is changing to the solely use of the Transavia brand for all operations. Prior to this, the in-flight product of the charter flights has already been adapted to one common low-cost standard, also to get rid of complexity. Since then, onboard meals are available on all flights only against payment.

Today, a capacity equal to 10 aircraft of a single type fleet is assigned to the activities of Basiq Air. The operational bases are the airports of Amsterdam and Rotterdam, only 60km away from one another. Destinations are partly overlapping with the ones of KLM, though Basiq Air operates at least at one end of the route to another, secondary airport of the destination. In spite of the fact that it attracts also business travellers without approaching them directly by a key account management, the low-cost carrier targets primarily passengers travelling for leisure reasons. This scope is also reflected by the destinations and the product offered. Basiq Air can be rather rated as a budget low-cost carrier. Mostly, secondary airports are served with one daily flight only. However, it offers service features as a check-in via the Internet. The carrier is organised as a profit centre with only 20 dedicated persons working for it in the functions of marketing, controlling, and finance. Services are sourced from Transavia as well as the aircraft operations which are provided and charged by the latter. The autonomy of Basiq Air and Transavia towards KLM is high, only restricted for investments and basic strategic decisions. Purchasing activities are shared with KLM. The corporate culture of Basiq Air is the one of Transavia, which is an organisation addicted to traditional values but used to efficient operations and quick actions. After Buzz was sold, Basiq Air has become the one and only low-cost unit within the KLM group integrated into the activities of Transavia.

Germanwings

Germanwings began flying in October 2002 as a separate low-cost carrier entity but fully belonging to the Eurowings Group (EW). In the latter firm, which also operates a regional carrier business model, Lufthansa (LH) participated with 24.9% of the shares, and recently increased its part to 49%. The foundation of Germanwings resulted from the transformation of the unprofitable charter business of EW into a low-cost carrier. The property rights of the brand name, which already existed before in the late eighties, have been granted by LH. Both the participation and the transfer of the branding rights give indications about the relationship of Germanwings with LH. Though LH publicly stresses that the relationship is settled only by the definition of the financial investment through its participation in EW, LH supported the creation of Germanwings in the supervisory board of EW. Prior to this, LH carried out several studies in examining the start of an own low-cost carrier, but it concluded that this could be realised only in a separate entity. At that time, LH also examined the possibility of making an investment in Ryanair. In conclusion, to some extent Germanwings can be considered as the low-cost carrier of LH. The interest is both financially and strategically given, but the influence on the decisions of Germanwings is rather limited. It is also important to note that, due to the minority participation of LH in EW and Germanwings, the latter is not obliged to consider the collective labour agreements of LH.

At the time of writing this paper, Germanwings has home bases in Cologne and Stuttgart and deploys a standardised fleet of 14 aircraft, which fly to destinations both attractive for leisure and business travellers. The routes overlap in part with the ones of LH. Recently, the carrier also added destinations important for tour operators, with whom it cooperates in offering flights included in packaged tours. Germanwings also established a key account management to address corporate customers. This fits with its product strategy; the carrier can be rated as a premium low-cost carrier, flying mostly to primary airports and deploying airplanes which are equipped with leather seats and in-flight entertainment devices. The organisation of Germanwings is located in Cologne, separated from the headquarter of EW in Dortmund. Partly, the staff and certain departments, like the production and network planning and marketing and sales, have been transferred form EW, since these functions have become unnecessary at EW. Other functions, such as financing, controlling, revenue accounting, and IT, are sourced from EW. The autonomy of Germanwings is moderate to high, only restricted in terms of investments and basic strategic decisions towards EW and LH.

“Swiss in Europe”

“Swiss in Europe” is neither its own entity nor a product label per se but, since September 2003, an internal naming from Swiss International Air Lines (Swiss) for the transformation of its European Economy Class product. Though all fares and flights are promoted with the mainline brand of the network carrier, certain characteristics of the Economy Class product within Europe match the definitions of the low-cost carrier business model. First, it makes use of a half-return pricing on the Internet which shows only one price for a flight at a time and thus influences customers’ mindsets by suggesting single fares. Secondly, it heavily promotes direct sales of point-to-point relations through the Internet with a more transparent pricing structure and fares starting at levels of the low-cost competitors. Thirdly, food and beverages offered in the Economy Class within Europe are available only against payment. The whole process of onboard catering, including the commercial risk, has been outsourced. Towards its customers it promotes a “best price” and “value for money” equation. If customers are asked about their perception of the Swiss Economy Class in Europe, many do not note a difference to the product of a low-cost carrier. After all, it is important how the customer perceives a product. Due to the fact that no organisation is dedicated to this unit, and all activities are integrated in the existing organisation of Swiss, it becomes clear that the autonomy of this low-cost unit is limited. While operating compulsively with the same means of production and brand to the same markets as the mainline carrier, and being staffed with the same organisation and people, it can thus be stated that “Swiss in Europe” equals the business model of the low-cost carrier. In this respect, it can be affirmed that apart from its premium network carrier business model serving primarily long haul markets and business travellers, Swiss operates a low-cost carrier simultaneously. Only the configuration of this low-cost carrier differs significantly from the other cases described above. Due to these major differences in configuration, the case has been chosen for investigation and discussion.

4.2 Motives for the move

The overall objective for airlines to set up a low-cost carrier while operating a network carrier is to increase corporate value. This can be achieved either by raising the profitability, or by enforcing growth. In the first case, the volume of the production remains unchanged, while the profitability is increased by reducing unit costs or by raising margins. In the second case, costs and margins stay at their previous levels, while an increase in volume (growth) results in a rise of returns. All measures are imposed to continuously defend and improve the competitive position of the grouping on the market place, and thus to increase its value.

In order to make use of these leverages, the incumbent airlines have four possibilities: exploiting economies of scale and scope, taking advantage of growth opportunities, and considering market and organisational dynamics. The identified motives in this research for establishing a low-cost unit can be assigned to these terms. All arguments are displayed in table 4. It is vital to note that they are differently important for the analysed cases. The particular importance of certain motives has also influenced the configuration of the low-cost units. For reasons of confidentially, table 4 shows only the number of incidents in the five cases on hand, but it does not refer to the importance of the argument for each case. However, the author points to the fact that the most important arguments for the incumbent airlines are the ones with the highest number of incidents.

Table 4 Motives for setting up a low-cost unit

Exploitation of economies of scale and scope	**Number of incidents**
• Use of existing know-how, rights, means of production, and organisational structures	4
• Possibility of a quick set up combined with relatively low costs	3
• Existence of suitable cost levels	2
• Realisation of Economies of Scale, e.g. in purchase activities	2
• Use of existing market power and reputation	2
• Spread of the corporate brand in additional market segments	2
Taking advantage of growth opportunities	**Number of incidents**
• Stimulation and enlargements of markets	5
• Development of new market segments	5
• Enabling corporate growth	5
• Market test for the acceptance of a new business model	5
Consideration of organisational dynamics	**Number of incidents**
• In the short run, only possible competitive reaction due to organisational slack and inertia	4
• No strategic logic of giving up the original business model	4
• Increasing focus in the grouping	4
• Saving the grouping by gaining back already lost customers	4
• Saving the grouping by indirectly lowering associated costs or increasing productivity (e.g. salaries, working hours)	4
• Saving the original business model by exposing possibilities to increase productivity (e.g. by process innovations)	3
• No feasibility to transform the original business model to address the new segments	2
Consideration of market dynamics	**Number of incidents**
• Reflection of changing consumer behaviour	5
• Imitation of a competitor’s move	5
• Protection of revenues or market shares against new competitors	5
• Identification of the most suitable business model for each market	4
• Extension of the offer to an upper or lower end of the market	4
• Creation or preservation of market access rights	3
• Increase in profitability on certain markets	3
• Deployment of free capacities (alternative compared with close-down or sale)	2
• Reduction of the entrepreneurial risk through diversification	2

Source: own research

4.3 Incompatibilities of the move

Incompatibilities in operating the two business models of the network and low-cost carrier at the same time appear for two reasons. First, they arise due to contrary and conflicting configurations. On the one side, these are determined by the definitions and requirements of the business models themselves, and thus can hardly be influenced by management (indicated as Ia in Figure1). On the other side, they are a consequence of the approach taken by the management in positioning and linking the two business models in the grouping (indicated as Ib in Figure 1). Secondly, they occur due to inconsistencies in the way the business model of a low-cost carrier has been applied to the new unit. Repeatedly, the incumbent airlines differ from the ideal configuration of how to set up a low-cost carrier described in table 2 (indicated as II in Figure 1).

Both reasons for the appearance of incompatibilities can be illustrated by making use of the concept of business modelling. Again, the author refers to the operational approach in defining a business model, developed by Bieger et al. (2002a), see table 2. Starting with the incompatibilities arising due to counteractive and conflicting configurations, the author gradually compares the eight dimensions of the two business models. Table 5 contains a list of the findings in the analysed cases. Each time they are assigned to the relevant dimensions of the business models. Moreover, the author comments on the underlying reasons of the incompatibilities, and mentions the number of incidents in the five cases on hand. These numbers give an indication about the spread and the perceived risk of the latter quoted by management. Overall, the incompatibilities affect customers, employees, alliance partners and suppliers, the management and the shareholders of the grouping.[5] According to the answers given by the experts, employees and management are affected most seriously.

Table 5 Negative impacts and incompatibilities of the business models

	Negative impacts and the reasons behind	Number of incidents
Product/ service concept	• **Cannibalisation between the business models** a) product offerings are too similar and not differentiated enough b) both business models address the same customer segments	4

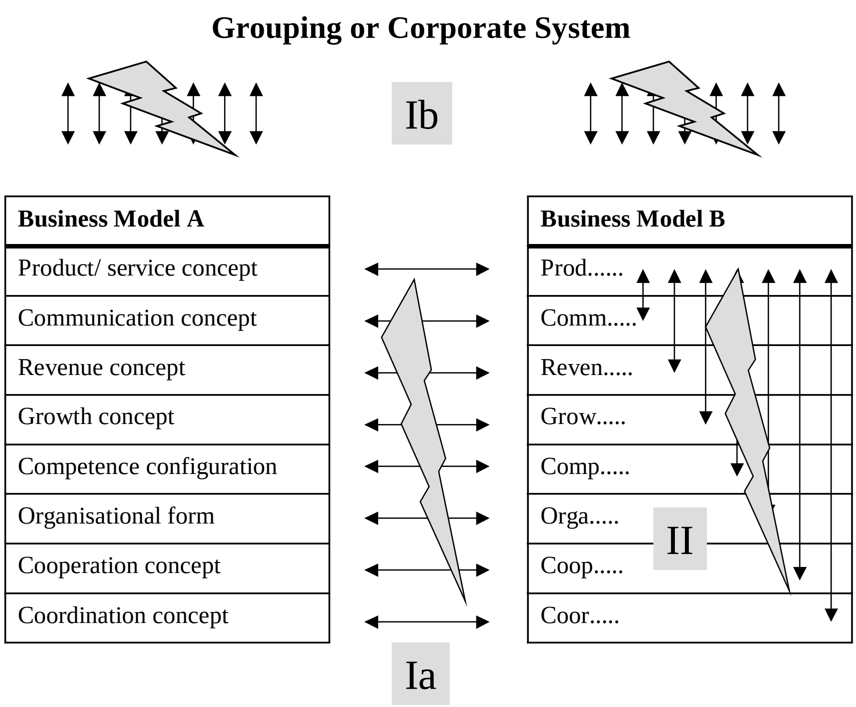
[5] Basically, each of these groups perceives the incompatibilities, and then reacts according to the evaluation of the perception, the change in emotions, and the given options. The resulting behaviour is influenced by the intensity and duration of the cognitive dissonance, and the values, attitudes, and needs of the individuals (Staehle et al., 1999).

Communication concept	• **Confusion of customers and employees** a) products differences are not transparent or insufficiently communicated both internally and externally	3 / 4
	• **Destruction of brand values** a) branding and communication concept is positioned too close b) customers relate service defections to the other business model c) customers knowing products of the other unit have higher expectations	3
	• **Implausibility of the communication concept** a) price-sensitive customers perceive the low-cost carrier as less cheap b) service-orientated customers perceive the network carrier less as a provider of premium services	3
Revenue concept	• **Decrease in revenues** a) reduced exploitation of the customer's readiness to pay a higher price b) enforcing price cuts in the fare system of the network carrier c) less acceptance of fare system of the network carrier d) restrictions imposed on the carriers e) dissatisfied customers not buying anymore the offerings of the grouping	3
Growth concept	• **Difficulties for the network carrier to pursue growth policy** a) focus in establishing the new unit slows down product innovations b) resources are allocated to the new unit	2
	• **Difficulties for the low-cost carrier to pursue growth policy** a) restrictions imposed on investments	3
Competence configuration	• **Increase in costs and decrease in efficiency** a) by restrictions imposed on the business models b) by doubled functions (e.g. in sales) c) by the inability of employees in clearly delivering the products d) resistance in driving costs down (new business unit as the excuse)	4
Organisational form	• **Decreased satisfaction of employees** a) different values of the corporate cultures b) fight for resources and revenues between the business models c) less identification of employees with the products offered d) worry about salary deductions	5
	• **Increase in organisational complexity** a) difficulties for the management in allocating resources b) less control about decisions in the grouping c) difficult or missing coordination between the business models d) corporate strategy becomes unclear	5
Cooperation concept	• **Less confidence and support from partners** a) travel agents and brokers dislike the enforcement of direct sales b) tour operators dislike the strengthening of individual travelling c) horizontal alliance partners are affected in market shares and yields d) outraging unions	4
Coordination concept	• **Decrease in network effects** a) conflicts in partnerships b) obligation to change coordination models towards hierarchy	3

Source: own research

As described above, the incompatibilities in setting up a low-cost carrier also occur due to an inconsistent application of the business model definition. The configuration of the low-cost unit has to take into account the main strategic success factors shown in the competence configuration of the business model (see table 2). These are market presence and process and cost management. In the cases on hand, the author has noted several trade-offs that have not been made in regard to these stipulations. A low-cost carrier implementing service amenities, such as differentiated products, baggage transfer, connections to other flights, free meals, booking via travel agencies, or the operation to primary (congested) airports will not be as cost efficient as required. Consequently, the complexity in the system is increased, and the productivity of the aircraft and staff is decreased. Thus, the product and service concept is not compatible anymore with the competence configuration and the organisational form. In addition, with offering more service amenities customers will less associate the carrier with low fares. In this respect, the communication and revenue concepts are not compatible with the competence configuration. The same incompatibilities arise, if the low-cost unit decides to address various customer segments, or to set up intensive cooperations with other carriers in the airline grouping. In these cases, complexity and cost levels are built up, too. All types of incompatibilities are illustrated in Figure 1.

Figure 1 Incompatibilities of Business Models



Source: own presentation

4.4 Propositions of how to control the move

The previous passages already indicated that certain impacts of establishing a low-cost unit are controllable and others are not. In the latter case, incompatibilities arise, as the definitions and requirements of the business models lead to contrary and conflicting configurations. Thus, the management has no influence on these issues (Ia in Figure 1). However, leverages are given, if the incompatibilities result from the approach taken by management in positioning and linking the business models in the grouping (Ib in Figure 1). Additionally, the number and extent of the cited incompatibilities depend on the consistent application of the low-cost carrier business model to the new unit (II in Figure 1). By keeping this aspect in mind, and by analysing the issues exhibited in table 5, the author developed a set of propositions of how to control the incompatibilities. Various insights from both the interviews and literature (especially Birkinshaw, 2001; Chandler, 1962; Charitou and Markides, 2003; Christensen, 1997; Hill, 1988; Tushman and O'Reilly, 1996) deepened the understanding and supported the formulation of these propositions.

Proposition 1 to 8 refer to the configurations of the two business models and how these are positioned and linked within the grouping. On the other hand, proposition 9 and 10 point to the characteristics of the market. These can not be influenced by management but give an indication under which market conditions the strategy of establishing a low-cost unit will be more effective or actually make sense. All propositions start with the words: “The effectiveness in establishing a low-cost unit depends on…..”

Proposition 1: Consistency in the application of the business models

The more consistent management follows the application of the business models, propagated in table 2, the less incompatibilities will result between the dimensions of the business models themselves. After all, strategy, structure, people, and culture must be aligned within each business model. Moreover, a low-cost carrier can not have low costs, if it offers service amenities, and creates complexity in its operations.

Proposition 2: Differentiation in the product and market approach

The incumbent airlines will be much more successful in achieving their objectives, if the product offerings of the business models are clearly separated and differentiated. This assertion is also drafted concerning the customer segments and geographical markets served. Conflicts will be minimised, if the markets are clearly divided by segments and regions. The author claims that this stipulation is crucial to achieve in any service industry, and especially in the airline industry.

Proposition 3: Extensive and clear communication of the products

Communication plays a vital role in informing customers and employees, and in explaining the differences of the products. If the attributes of the product and service concepts and the revenue concepts are properly communicated, transparency into the product offerings and requirements is increased. This will secure expectations, and consequently avoid disappointments and confusion among customers and employees.

Proposition 4: Separation of branding and resources but sharing of back-office activities

The number and extent of the cited incompatibilities will be significantly reduced, if the boundaries of the business units are also clearly set in terms of branding and resources. Though the investment into market awareness and reputation will be much higher, the risk of diluting the main brand is minimised when separating the communication concept. Moreover, the unambiguous allocation of staff, capital, and means of production (e.g. aircraft) to each business model helps in avoiding incompatibilities and complexity. In order to make use of economies of scope, the author suggests to share back-office activities (e.g. revenue accounting, purchasing, training facilities, financial controlling, or even revenue management).

Proposition 5: Autonomy of the low-cost unit but affiliations with the grouping

The low-cost unit will be more successful the higher its autonomy is to act on the market place. Autonomy in decision-making shall be given anyway concerning operational issues. However, the independence should be limited with regard to strategic decisions (e.g. about the markets regions served, and growth path pursued). This avoids fierce competition between the business models, and supports a clear corporate strategy. Furthermore, corporate management has to internally promote and strengthen the team spirit within the grouping. Information sharing and joint events will cut back manifestations of rivalry.

Proposition 6: Better start from the “scratch” or follow an participation strategy

It is far better to start from scratch with the low-cost carrier than to try to squeeze significant savings from an existing airline operation. Unless the low-cost unit is positioned close to the boundaries of the other business models, costs leech across. The functional organisations within a parent company are powerful enough to capture and reduce the cost advantage of the internal low-cost unit. Any participation into an airline already operating at low costs will also be appropriate.

Proposition 7: Size of the low-cost unit and motives for the establishment

The number and extent of the incompatibilities grow with the size of the low-cost carrier. When the unit remains small, certain issues do not appear, as fewer individuals are concerned about it. However, in this case, the low-cost carrier can not improve its competitive position both on the seller and on the buyer market (e.g. market power, economies of scale). In addition, management should have a long-term view which growth path for the carrier is pursued. After all, the rationale for founding the low-cost unit also matters. The unit has a different scope and set up, if it has the order to enable either corporate growth or just the protection of the market (offensive vs. defensive response to market changes).

Proposition 8: Leadership characteristics and flexibility of the grouping

The establishment of an additional business model raises complexity in the grouping, as the firm gets more diversified. The management has the difficulty in properly allocating resources, and in controlling the organisation and the interest groups affected. Thus, the success of the hybrid approach heavily depends on the management skills of the people in charge, and the incentive systems applied. In addition, the effectiveness of the strategy will be higher, if the flexibility of the grouping allows quick reactions and changes. The relationship of the management towards the unions is crucial in this manner.

Proposition 9: Importance of network effects

The more important cooperations and the resulting networks effects are for the value proposition of the case under consideration, the higher are the number of potential incompatibilities with partners. Any incumbent airline strongly integrated into cooperations will be more exposed to the incompatibilities with partners, when a low-cost unit is around. This proposition leads to the question, whether it makes sense to follow such a strategy in network industries, in which market-based networks play an important role (e.g. in transport, power supplying, telecommunication, etc.)

Proposition 10: Market characteristics, such as maturity, size, extensibility, and structure

The number and extent of the incompatibilities also depend on the maturity of the airline market, the size, and extensibility of the customer segments, and the structure of the demand (concentrated vs. scattered demand, e.g. UK against Germany). The more mature the market, the smaller the segments, and the more concentrated the demand is, the higher is the challenge for the management in coping with the negative impacts. Moreover, the ability to actually differentiate the products has an important leverage. Industries characterised by homogenous offerings (e.g. service industries, and in particular the airline industry) are more exposed to incompatibilities than others.

4.5 Comparison of the analysed cases

When comparing the examined cases in this paper, it becomes apparent that the incumbent airlines have taken different approaches first in configuring the dimensions of the business model of the low-cost carrier (see table 2). Secondly, the implementation differs in the way the business models have been positioned and linked in the grouping. In particular, the author's attention is drawn on the dimensions of the product and service concept, the communication concept, the revenue concept, the competence configuration, and the organisational form. In these dimensions, the airlines have set up different configurations with regard to the destinations served, the customer segments addressed, the branding and pricing systems chosen, the means of productions (aircraft) allocated, the emphasis on the distribution channels (go-to-market mechanism), the organisation and staff assigned, the corporate context settled, and the competences conceded. The elements are either identical, related or separated for the business models of the network and low-cost carrier. Figure 2 compares the configuration of the analysed cases.

Overall, it can be noted that the incumbent airlines have each time attributed a different level of independence and autonomy to the low-cost unit. While Germanwings can be identified as the example with the highest independence towards the incumbent Lufthansa, "Swiss in Europe" is marked as the example with the lowest level. In between, Go, Basiq Air, and Buzz constitute the order in the level of independence from high to low. Only Germanwings and Go can be named as true subsidiaries while Basiq Air, buzz, and "Swiss in Europe" are within-low-cost carrier business models. The different levels of granted independence will also influence the number and extent of the incompatibilities within the grouping.

Figure 2 Comparison of the configurations of the analysed cases

	British Airways / Go			**KLM / Buzz**			**KLM / Basiq Air**			**Lufthansa / Germanwings**			**"Swiss in Europe"**		
	iden-tical	related	sepa-rated	iden-tical	related	sepa-rated	iden-tical	related	sepa-rated	iden-tical	related	sepa-rated	iden-tical	related	sepa-rated
Destinations served		x				x		x			x		x		
Segments addressed		x			x			x			x			x	
Branding		x				x			x			x	x		
Pricing system			x		x				x			x		x	
Means of production			x		x				x			x	x		
Emphasis on distrib. channels			x			x			x			x		x	
Organisation / staff		x				x			x			x	x		
Corporate context			x		x			x				x	x		
Competences			x		x			x				x	x		

Source: own research

5. Conclusions

The analysis of five cases in the European airline industry identified four major terms summarising the motives for the incumbent airlines to set up a parallel low-cost unit. These are the exploitation of economies of scale and scope, taking advantage of growth opportunities and consideration of market and organisational dynamics. Furthermore, the business modelling concept explained the incompatibilities. These arise either due to contrary and conflicting configurations in the dimensions of the business models or due to inconsistencies in the way the definitions of the business models were applied. Both issues can be influenced by management, though a part of the incompatibilities come up compulsively because of the definitions and requirements of the business models themselves. For the main part of the appearances, the author developed a set of propositions of how to eventually control the number and extent of the incompatibilities. Complying with these propositions help the management of the incumbent airlines to be more efficient in establishing a low-cost unit, so that the benefits of this strategy are higher than the costs.

Finally, the compliance with some of these propositions were analysed for the cases on hand. It can be demonstrated that the cases differ significantly in their configurations, and that the design of certain dimensions of the business models lead to incompatibilities. However, the author refrains from evaluating the prospect of success for these cases. The propositions have not yet been tested empirically, any statistical generalisation nor theory deduction is not possible. Nevertheless, it stands out that the attempts having separated the business models in different entities or organisations but maintaining a certain level of control are the more efficient in following this competitive response.

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References

Abell, D.F., 1980. Defining the Business: The Starting Point of Strategic Planning. Prentice-Hill, Englewood Cliff, NY.

Amit, R., Zott, Ch., 2001. Value Creation in E-Business. Strategic Management Journal 22, 493-520.

Bethune, G., Huler, S., 1998. From Worst to First: Behind the Scenes of Continental's Remarkable Comeback. John Wiley & Sons, New York.

Bieger, Th., Rüegg-Stürm, J., von Rohr, Th., 2002a. Strukturen und Ansätze einer Gestaltung von Beziehungskonfigurationen - Das Konzept Geschäftsmodell. In: Bieger, Th. et al. (Eds.), Zukünftige Geschäftsmodelle: Konzept und Anwendung in der Netzökonomie. Springer, Berlin etc., pp. 35-61.

Bieger, Th., Döring, Th., Laesser, Ch., 2002b. Transformation of business models in the airline industry - impact on tourism. In: Bieger, Th., Keller, P. (Eds.), Publication of AIEST, 52nd Congress. Edition AIEST, St. Gallen, pp. 49-83.

Birkinshaw, J., 2001. Strategies for Managing Internal Competition. California Management Review 44(1), 21-38.

Burgelman, R.A., 1983. A model of the interaction of strategic behavior, corporate context, and the concept of strategy. Academy of Management Review 8, 61-70.

Burgelman, R.A., 1991. Intraorganisational Ecology of Strategy Making and Organizational Adaptation: Theory and Field Research. Organizational Science 2, 239-262.

Campbell, D.T., 1965. Variation and selective retention in socio-cultural evolution. In: Barringer, H.R., Blanksten, I., Mack, R.W., (Eds.), Social Change in Developing Areas: A Reinterpretation of Evolutionary Theory. Schenkman, Cambridge, MA.

Chandler, A.D., 1962. Strategy and Structure: Chapters in the History of American Industrial Enterprise. MIT Press, Cambridge, MA.

Chandler, A.D., 1990. Scale and Scope: Dynamics of Industrial Capitalism. Harvard University Press, Cambridge, MA.

Charitou, C.D., Markides, C.C., 2003. Responses to Disruptive Strategic Innovations. MIT Sloan Management Review 44(winter), 55-63.

Christensen, Cl.M., 1997. The Innovator's Dilemma: When New Strategies Cause Great Firms to Fail. Harvard Business School Press, Boston.

Christensen, Cl.M., Johnson, M.W., Rigby, D.K., 2002. Foundations for Growth: How to Identify and Build Disruptive New Businesses. MIT Sloan Management Review 43(spring), 22-31.

Donaldson, L., 2001. The contingency theory of organizations. Sage Publications, Thousand Oaks, CA.

Eisenhardt, K.M., 1989. Building Theories from Case Study Research. Academy of Management Review 14(4), 532-550.

Eisenhardt, K.M., Galunic, Ch.D., 2000. Coevolving: at last, a way to make synergies work. Harvard Business Review 78(1), 91-102.

Galunic, Ch.D., Eisenhardt, K.M., 2001. Architectural innovation and modular corporate forms. Academy of Management Journal 44, 1229-1249.

Graf, L., 2003. Preisstrategien von Netzwerk Carriern gegen Low-Cost Carrier in der europäischen Airline-Industrie. Working paper of the Universität St. Gallen, St. Gallen.

Hill, Ch.W.L., 1988. Differentiation versus low cost or differentiation and low cost: A contingency framework. Academy of Management Review 13(3), 401-412.

Knyphausen-Aufseß, D.zu, Meinhardt, Y., 2002. Ein Ansatz zur Systematisierung und Kategorisierung von Geschäftsmodellen. In: Bieger, Th. et al. (Eds.), Zukünftige Geschäfts-modelle: Konzept und Anwendung in der Netzökonomie. Springer, Berlin etc., pp. 63-90.

Lovas, B., Ghoshal, S., 2000. Strategy as Guided Evolution. Strategic Management Journal 21, 875-896.

Markides, C.C., 1997. Strategic Innovation. Sloan Management Review 38(spring), 9-23.

Markides, C.C., 1999. All the Right Moves: A Guide to Crafting Breakthrough Strategy. Harvard Business School Publishing, Boston.

Mason, Ch.H., Milne, G.R., 1994. An Approach for Identifying Cannibalization within Product Line Extensions and Multi-Brand-Strategies. Journal of Business Research 31, 163-170.

Moorthy, K.S., Png, I.P.L., 1992. Market Segmentation, Cannibalization and the Timing of Product Introductions. Management Science 38, 345-360.

Nadler, D.A., Tushman, M.L., 1999. The Organization of the Future: Strategic Imperatives and Core Competencies for the 21st Century. Organizational Dynamics 47, 45-60.

Panzar, J.C., Willig, R.D., 1981. Economies of Scope. American Economic Review 71, 268-272.

Porter, M.E., 1980. Competitive Strategy: techniques for analyzing industries and competitors. The Free Press, New York.

Porter, M.E., 1996. What is Strategy? Harvard Business Review 74(November-December), 61-78.

Sorenson, O., 2000. Letting the market work for you: An evolutionary perspective on product strategy. Strategic Management Journal 21, 577-592.

Staehle, W.H., Conrad, P., Sydow, J., 1999. Management: Eine verhaltenswissenschaftliche Perspektive. Vol.8, Vahlen, München.

Teece, D.J., 1980. Economies of Scope and the scope of the enterprise. Journal of Economic Behavior and Organization 1, 223-247.

Tushman, M.L., O'Reilly, Ch.A., 1996. Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change. California Management Review 38(4), 1-23.

Williamson, O.E., 1991. Strategizing, Economizing, and economic Organization. Strategic Management Journal 12, 75-94.

Yin, R.K., 1994. Case Study Research - Design and Methods. Applied Social Research Methods Series 5. Sage Publications, London.