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Center for Scenario
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RESEARCH UNIT



FUTURE SCENARIOS

for the European Airline Industry

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1. FOREWORD

Will low-cost airlines operate all intra-European flights by 2015? Will an ongoing economic crisis permanently change customer requirements and demand for air travel? Are China, India or the countries of South America the major growth markets for traditional European network carriers like Lufthansa, British Airways or Air France? Or will these companies continue to grow strongly in the international arena based on their solid European network and customer base? In this study, we aim to provide answers to these questions and we show implications for managing airline companies today in the year 2010.

The globalized economy is more and more dominated by complexity, volatility and uncertainty. Many aspects of the future are impossible to forecast accurately. No single 'right' projection can be derived from past behavior. Nevertheless, managers need to take decisions and commit resources. This is only possible if uncertainty is accepted and made part of their reasoning. Conventional forecasting tools, traditionally used to support decisions, are under these circumstances inadequate, as they do not sufficiently take into account uncertainty. Scenario planning differs in this aspect fundamentally from conventional forecasting tools. It is a planning tool that attempts to capture a wide range of possible development options thus stimulating decision makers to consider influences that they would otherwise ignore.

As one of the leading global scenario experts Herman Kahn stated that scenarios allow and encourage decision makers to think the unthinkable¹. They enable managers to expand their thinking, generate new insights and allow to prepare for and to proactively react to possible future developments.

Our scenario study on the European airline industry, which focuses particularly on network carriers, supports managers in this endeavor. We have developed four scenarios for the industry in the year 2015 based on two key uncertain developments and important industry trends. We hope that these scenarios inspire and help manage the risks and opportunities that this dynamic industry faces.

We wish you an insightful journey through the present situation and potential future of the European airline industry.



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2. EXECUTIVE SUMMARY

As Ryanair's CEO Michael O'Leary put it: 'Air transport is just a glorified bus operation'²⁾. Indeed, flying as a comfortable and fast way of travel has lost much of its glamour from the past. Whereas air travel was a high-price privilege for the upper classes during most of the last century, globalization has led to an increased need for affordable and fast world-wide passenger transport.

On the one hand, this creates enormous growth potential for airlines to satisfy. On the other hand, it also creates challenges. New technologies and the vanishing of economic barriers and regulations led to decreasing prices and air transportation turning into a commodity³⁾. The emergence of European low-cost airlines like Ryanair, easyJet and Air Berlin further spurred this development. The traditional, state-owned network carriers are facing these new competitors, which are smaller and highly flexible and can tap into almost every market within Europe. Further challenges for the airline industry can be seen in the environmental awareness arising in the population and its effect on consumption behavior. Besides that, the industry's strong dependency on the overall economic development on one side and oil as the basis for kerosene cost on the other, present major threats.

To overcome these challenges and help managers in the industry to plan for the future, we created the current study using our new and innovative approach to scenario-based strategic planning that was jointly developed by HHL and Roland Berger Strategy Consultants. Our scenarios are based on extensive research, expert workshops and a survey that combines insights from companies which together make up for more than 40 percent of the total revenue of the airline industry in Europe. This insures a holistic picture of the relevant trends and influence factors and safeguards the quality of the scenarios.

The four scenarios, which we created, center around two key uncertainties, which we identified in our survey with industry experts and a subsequent scenario workshop. These two critical uncertainties are:

- ❖ **Regulation of the industry in Europe**
- ❖ **Price sensitivity of the customer base**

Based on these key uncertainties as well as additional trends and influence factors four plausible scenarios emerge on how the European airline industry might evolve between now and the year 2015. These four scenarios are the following:

❖❖ **Network Fortress** describes a future, in which the European network carriers have regained a strong competitive position in both the long-haul and the intra-European market. The recession of 2008 and 2009 was followed by a quick economic recovery, which increased corporate travel budgets again in 2012. In turn, the demand for low-cost travel stagnated in favor of high quality and convenient travel, which led to growth in the more profitable business and first class segments. The growing long-haul market connecting Europe with the booming ASEAN region and China is dominated by European airlines, which can operate from a largely protected European market to which competition from Asia and the Middle East had only limited access to due to restrictive traffic rights legislation.

❖❖ **Europe under Siege** describes a world in which Asian and Middle Eastern competitors dominate the future of European network carriers. Despite growing business travel based on solid economic growth in Europe, the industry faces severe competition, also in its home market. However, low-cost carrier have not been able to continue their growth seen in the first decade of the new millennium as customers became increasingly aware of the total cost of flying low-cost. "New World", a new alliance by Middle Eastern and Asian airlines was formed in 2012 focusing on capturing the growing demand for high quality air travel around the world. The alliance also partners with a major European airline to gain easier access to the attractive European market. With their new fleet and superior service offering, the alliance has quickly gained market share and is expected to continue its growth.

❖❖ **Decline of Champions** describes a world that is characterized by declining European network carriers struggling to survive the intense local and global competition. While Europe and the United States of America are again in the middle of an economic crisis, Asia is flourishing. The recession in the western world has led to a shift in the mindsets of business and private customers towards a strong price orientation. European network carriers therefore are under heavy pressure from both European low-cost rivals and strong Asian and Middle Eastern competitors on long-haul routes. These companies have grown significantly in recent years due to favorable cost position, innovative product and high client recognition.

❖❖ **New Horizons** refers to a world in which Europe is still struggling with the aftermaths of the financial crisis, which originated in 2008 and 2009. Thus, business travel has been cut to a minimum as companies face severe cost pressure. In addition, an increasing market share of this shrinking segment is captured by low-cost airlines. While Europe is still faced with the aftermaths of an economic crisis, the ASEAN region together with China has developed into the most vibrant business area worldwide, which has increased the demand for long-haul flights to and from Asia tremendously over the last 5 years. These traffic flows are dominated by European carriers, which benefit from political protection of the sector in Europe and a growing customer sentiment to buy 'European'.

Figure 1: Future scenarios for the European airline industry



Each of these scenarios describes different possible developments of the industry in the next five years. They are not intended to predict the future. Rather, they aim at inspiring ideas that expand the field of vision of industry leaders and at helping them to prepare for the opportunities and challenges ahead.

Based on the scenario results, we recommend a core strategy for European network carriers: First, continue restructuring and efficiency improvements to curb cost disadvantages. Second, increase service and quality levels by fostering innovations both in the air and on ground in order to remain competitive against Asian and low-cost carriers. This way, a hybrid strategy can be followed that allows investments in core customer preferences and cost saving as well as efficiency increases in back office and support processes. In our scenarios, we have shown the enormous impact that changes in the European regulatory environment can have for European network carriers. Giving foreign airlines unreasonable access to the European market sidelines European network carriers and strongly hampers their growth prospects. Lobbying national and European bodies to constantly re-assess the advantages and disadvantages of liberalization remains top priority for European airline managements.

This core strategy has to be complemented by scenario-specific strategic options such as the increased presence on the growing Asian market or the introduction of new innovative pricing schemes.

Detailed strategy recommendations, however, can always only be derived in the light of the specific situation of the respective company. Our scenarios can serve as a foundation to develop company specific strategies and action plans that allow European players to remain competitive in this highly dynamic environment. Therefore, it is essential to review and discuss assumptions, implications and required strategic moves with the responsible management.

3. THE EUROPEAN AIRLINE INDUSTRY

The European airline industry is highly dynamic, competitive and has gone through significant changes in the last decade. This chapter highlights industry characteristics and trends along four criteria – comparison of business models, market overview, changes in regulation, opportunities and challenges – and thus supplies an information base for a better understanding of the scenarios described in chapter 4.

Comparison of business models

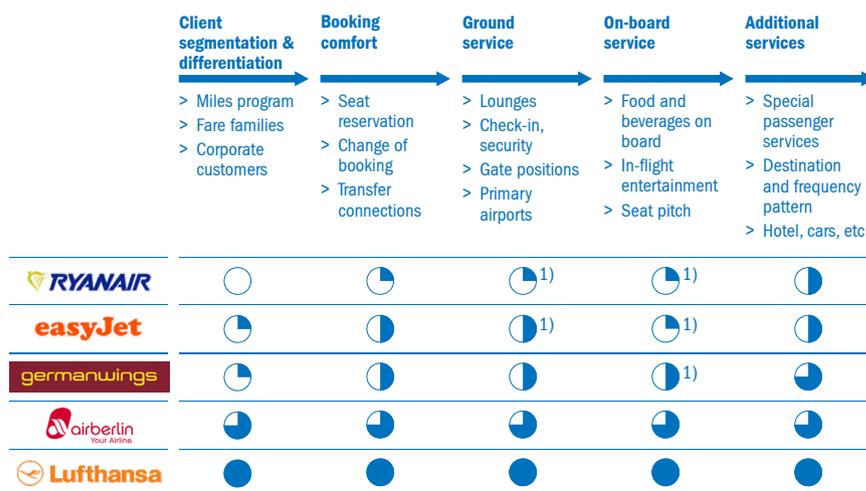
Traditional network carriers

Network carriers like Lufthansa, Air France or British Airways present the airline type with the longest tradition in airline history. Having been state-owned in many cases, these airlines offer a high-quality product and superior service level on an extensive route network. Based on the so-called “hub & spoke” system⁴⁾, network carriers link international and national catchments by serving primary and secondary airports and transporting passengers from these cities via the respective hubs using feeder and de-feeder connections. Network carriers often pursue a quality strategy. They focus on offering a unique and appealing product, in order to differentiate from competitors and establish preferences with the customer. This includes a broad range of services before, during and after the flight, such as frequent-travel programs, differentiated lounges, superior seats and F&B-service, amongst others⁵⁾. Thanks to these features, network carriers achieve a particularly strong position in the business travel segment⁶⁾. Offering differentiated products to different customer segments, network carriers usually operate a three class system with an economy-, business- and first class. As a consequence of these high product and service standards, network carriers charge customers higher fares than budget carriers.

Low-cost carriers

Low-cost carriers like Ryanair or easyJet operate at extremely low cost levels with inexpensive fares and a service offering reduced to the main purpose of transportation (see figure 2)⁷⁾.

Figure 2: Differences: Low-cost and network carrier business model



Level of Service: ○ Low ● High 1) Against surcharge

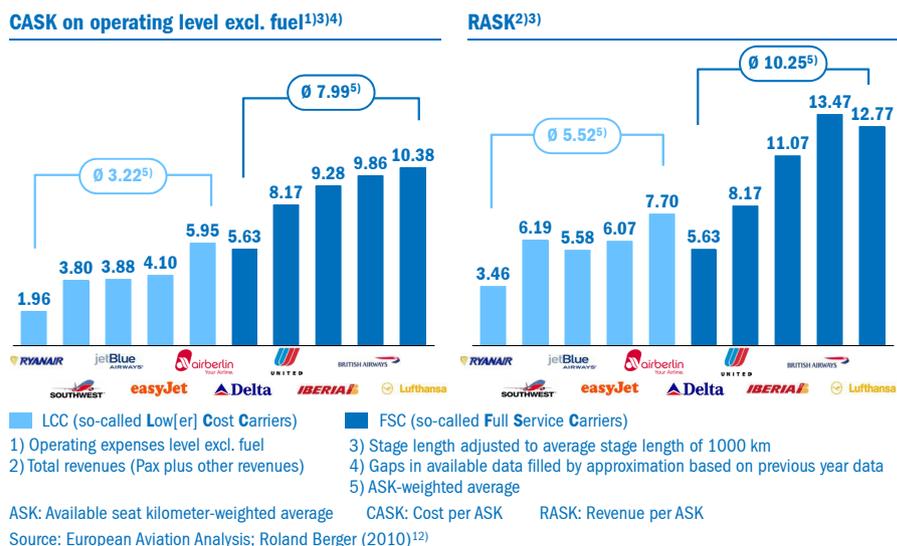
Source: European Aviation Analysis; Roland Berger (2010)⁸⁾

By removing complexities from operations, these carriers can achieve a significant unit cost advantage over full-service carriers (see figure 3)⁹⁾. The core business model differences include the selection of attractive markets and the ability to stimulate new passenger demand.

Although a comparison of both business models cannot be entirely fair due to their fundamental differences and lack of true cost and revenue transparency by traffic segments, the comparison of operational unit cost highlights the significant cost gap between low-cost and full-service network carriers. Driving this difference are lower overhead cost, savings within distribution and passenger services, lower crew cost, lower airport fees and ground handling cost, higher seat configuration as well as lower asset cost due to lower prices and higher aircraft utilization¹⁰⁾.

Although cost disadvantages have been offset by higher revenues of full-service carriers in the past (see figure 3 and 6), significant pressure on yields has been observed over the last two decades¹¹⁾. We believe, that this trend will continue due to the severe competition between players, the expected ongoing overcapacity in the market and the general pressure deriving from a changing customer willingness to pay.

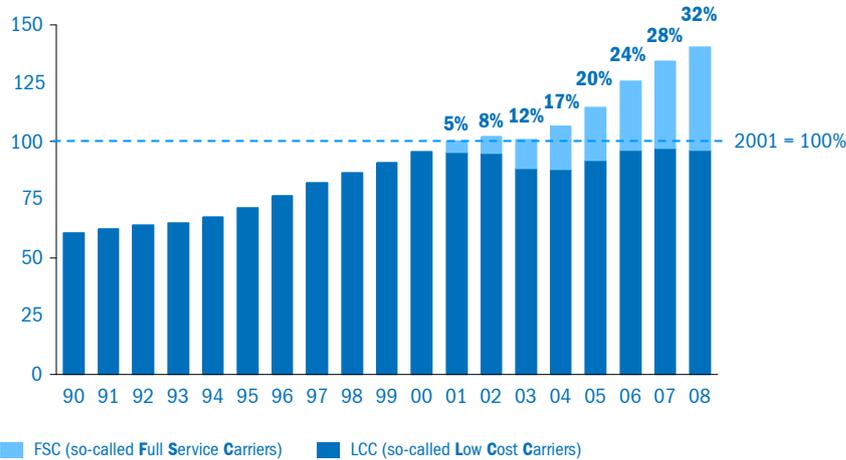
Figure 3: Cost comparison between low-cost carriers and network airlines
[EUR ct per ASK excl. fuel]



Market overview

The European airline market has been growing steadily over the last decades and has more than doubled in size since 1990. However, in the last 10 years this growth has been almost entirely fueled by low-cost carriers (see figure 4). With the emergence of budget airlines in the late 1990s the growth trend of established network carriers has stopped. Today, they still handle approximately the same demand for air travel as in 2000, while their relative market share has decreased. In contrast, low-cost carriers have grown at high double digit rates and captured large parts of the market. They have expanded their market share from 5% in 2001 to 32% in 2008.

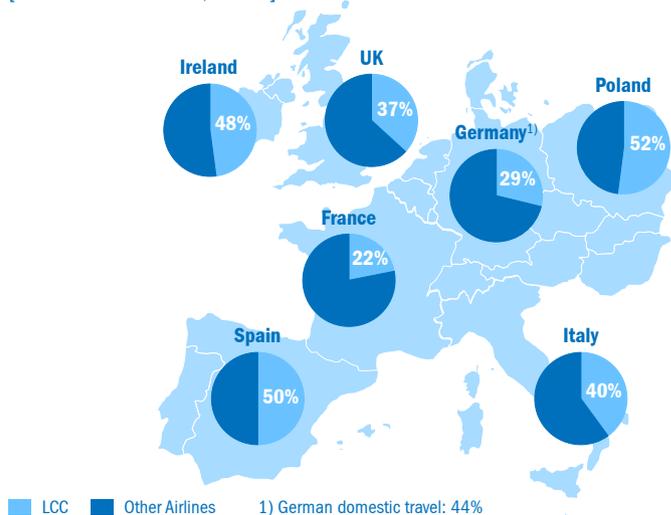
Figure 4: Development of demand for Air Travel in Europe
[indexed, base year 2001]



Source: European Aviation Analysis; Roland Berger (2010)¹³⁾

In some European countries, low-cost carriers even dominate the market. In Spain, they account for 50% of the total international capacity offered, in Poland even for 52%. Also in other economies, budget carriers have been able to expand their market share in an impressive way over the last decade, which puts severe pressure on established network carriers (see figure 5). In Germany, Europe's largest economy, low-cost airlines operate 29% of the international and 44% of the domestic flights.

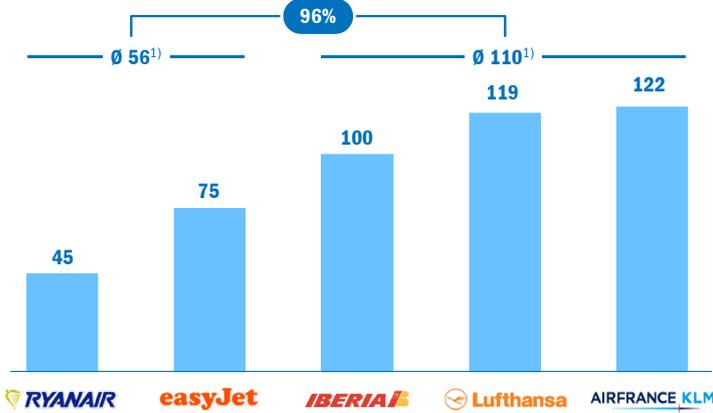
Figure 5: European market share of low-cost carriers
[international traffic, 2009]



Source: European Aviation Analysis; Roland Berger (2010)¹⁴⁾

The high market share of low-cost carriers rests on their cost advantage and their lower ticket prices, which allow them to access new market and generate new traffic. As shown in figure 6, the average ticket revenue of network carriers is about two times higher than the one of low-cost carriers.

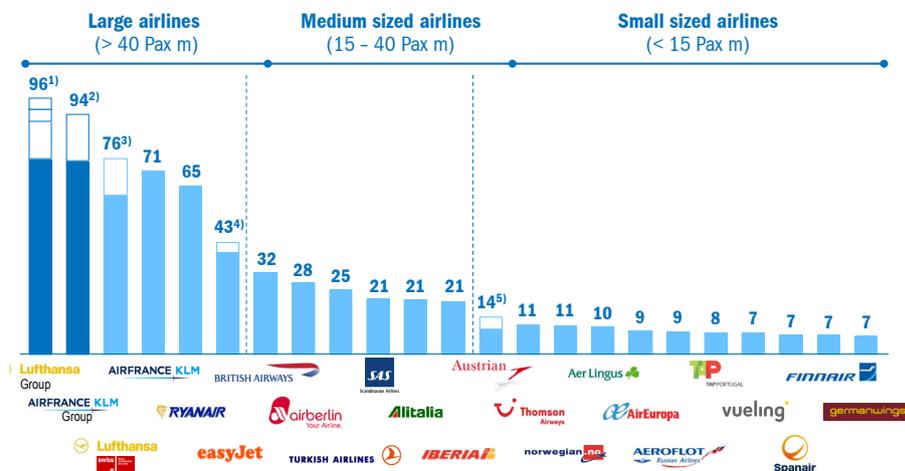
Figure 6: Ticket prices revenues by European airlines on intra-European routes 2009
[EUR per Pax, not stage-length adjusted]



1) Revenue per Pax (weighted average)
Source: European Aviation Analysis; Roland Berger (2010)¹⁵⁾

The strong position of low-cost carriers is also reflected in the size of the major airline companies in Europe. Two of the four largest airlines by passenger numbers today are low-cost carriers. With 65 and 43 million transported passengers respectively, Ryanair and easyJet are larger than British Airways and any other established network carriers with the exception of Lufthansa and Air France/KLM. Despite the size of the market leaders the European airline industry is still largely fragmented. 36 network carriers and 14 low-cost carrier operate in the market¹⁶⁾, many of which are small in size with passenger numbers below 15 million (see figure 7).

Figure 7: Transported passengers by major European airlines [Pax m, 2009]



1) Incl. SWISS, Austrian, Germanwings, Brussels Airlines and bmi 2) Incl. Alitalia 3) incl. Lufthansa, Lufthansa CityLine, SWISS
4) incl. easyJet and easyJet Switzerland 5) Incl. Austrian and Austrian Arrows

Source: European Aviation Analysis; Roland Berger (2010)¹⁷⁾

Changes in regulation

For the first few decades of its existence, the airline business was characterized by major legal and political barriers to entry. These came down in the United States in 1978, when the U.S. administration gave in to pressure to liberalize the heavily regulated aviation market¹⁸⁾. In 1992, the wave of liberalization arrived in Europe¹⁹⁾ further making its way to the Asia-Pacific region²⁰⁾. Going through several consecutive stages of deregulation, Europe is now a "single market" including full cabotage²¹⁾. However, access to the intra-European market for non-European airlines is still restricted.

On an international level, the airline industry is still heavily regulated concerning ownership restrictions as well as rules preventing access to capital and markets. However, further liberalization is expected in the global aviation market. In 2009, the "Agenda for Freedom", a Multilateral Statement of Policy Principles regarding the Implementation of Bilateral Air Service Agreements was signed by seven states and the European Commission. The agreement calls for an easier access to capital, less restrictions to market access and higher freedom with regard to pricing. While these policy principles are non-binding, they are an important statement of common government intention among the most active countries driving global aviation policy²²⁾. Figure 8 summarizes the current global regulatory environment and shows the effect the respective rules have on the consolidation process of the industry.

Figure 8: International airline regulation and their influence on the consolidation process

	NORTH AMERICA	EUROPE	ASIA
Routes and traffic rights	<ul style="list-style-type: none"> Relatively low restrictions, limitations either due to bilateral agreements or slot restrictions at coordinated airports Open Skies with Europe since 2008 	<ul style="list-style-type: none"> No limitations for European airlines within Europe Open skies agreement reduces limitations for US carrier – however, restrictions due to slot limitations at coord. airports 	<ul style="list-style-type: none"> Mainly bilateral agreements with 5th freedom traffic rights Many countries very restrictive
Foreign participation and control	<ul style="list-style-type: none"> USA: Foreign participation limited to max 25% of voting rights 	<ul style="list-style-type: none"> Foreign participation limited in many cases to max 49% Increased freedom – however carrier have to secure ... 	<ul style="list-style-type: none"> Strong domestic/regional laws restrict cross-border participations Franchising trend of airlines as solution to build pan-Asian links
Cabotage-right	<ul style="list-style-type: none"> In the US not allowed – despite open skies major restriction for many airlines for market penetration 	<ul style="list-style-type: none"> Relatively open – US airlines are allowed to operate between EU-countries. Very little use in practice, more code-sharing 	<ul style="list-style-type: none"> Most important domestic markets (e.g. China, Australia, India) very restrictive
Antitrust	<ul style="list-style-type: none"> Major concerns regarding anti-trust/concentration of power. However, players are forcing merger to improve profitability 	<ul style="list-style-type: none"> Concerns regarding antitrust/concentration of power. However, regulators mainly focus on route level – most of the mergers have been approved with slight restrictions 	<ul style="list-style-type: none"> Australia/New Zealand with stronger antitrust rules, which limit mergers Many Asian countries have no strong antitrust rules
Other relevant topics	<ul style="list-style-type: none"> USA: Major concerns regarding potential effect on civil reserve fleet in case of cross border mergers with foreign majority participation; Chapter 11 clause currently reduces consolidation 	<ul style="list-style-type: none"> Strong control of EU regarding governmental subsidiaries for airlines 	<ul style="list-style-type: none"> Safety rules for some Asian carriers may limit interest for mergers

Limitations of consolidation process ○ Low ● Medium ● High

Source: European Aviation Analysis; Roland Berger (2010)

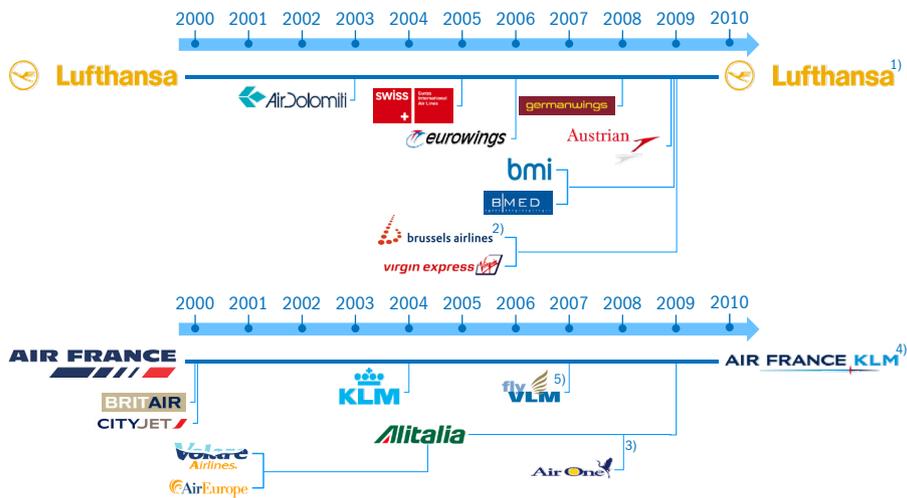
Opportunities and challenges

Opportunities

Market consolidation

Since the start of deregulation in the United States in 1978 more than 200 airlines have merged, which allowed large gains in efficiency for the carriers involved. Consolidation is indeed a global trend that is exemplified by the recent merger between British Airways and Iberia in Europe. In fact, many European airlines have grown through acquisitions in the last decade. Most notably, apart from British Airways are Lufthansa and Air France/KLM as shown in figure 9²³). However, this trend is not only limited to full mergers. As the regulatory environment often prevents foreign majority ownership many airlines build up strategic equity stakes, which may be enlarged later. Singapore Airlines Group for example purchased a 49% equity share of Virgin Atlantic in 1999 to gain indirect access to the traffic between London Heathrow and the US²⁴). Due to the large efficiency gains and better marketing possibilities, which strategic alliances or mergers hold for airlines, further consolidation in the global airline industry is expected throughout the decade.

Figure 9: European market consolidation process – Lufthansa and Air France



- 1) 50% participation in Sun Express 2) Minority participation 3) Minority shareholding of AF-KLM in Alitalia
4) Further participation in charter airlines Transavia and Martinair 5) Participation via subsidiary City Jet

Source: European Aviation Analysis; Roland Berger (2010)²⁵⁾

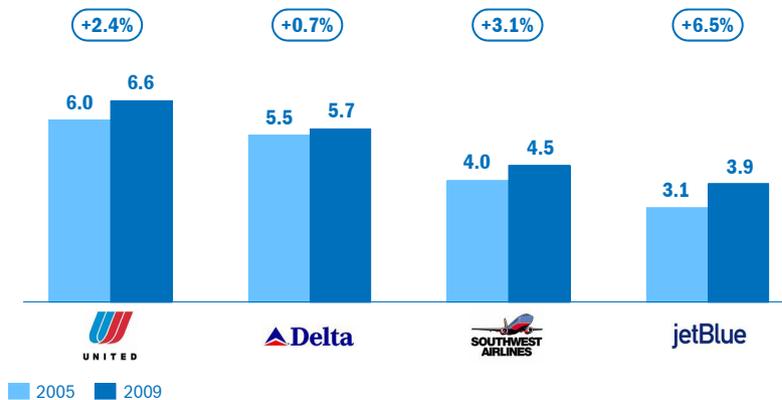
Convergence of cost structures

The last five years saw a convergence between the cost structures of network- and low-cost carriers in the United States. While many network carriers like Delta Air Lines or United Airlines have been able to stabilize their cost base, cost at many budget airlines have increased (see figure 10). Network carriers underwent severe restructuring as well as consolidation efforts and reduced their service offering to improve their competitive position in terms of efficiency, quality and pricing²⁶⁾. In turn, low-cost carriers had to face higher wages and improved their service offering for business travelers.

The cost difference per available seat kilometer was reduced significantly and is now in some cases comparable between the different airline business models. This implies pressure on low-cost carriers, which could lose their USP on the American airline market. A similar development may follow in the European industry, in which cost of network carriers are still comparatively high.

Figure 10: Cost convergence between network- and low-cost carriers

[CASK in US ct/ flown seat kilometer excl. fuel, change in % p.a]



CASK based on operating expenses excluding fuel; CASK not stage length adjusted, therefore comparison with limitations
Source: Company information; ATI; Roland Berger analysis (2010)

New decade of hubs

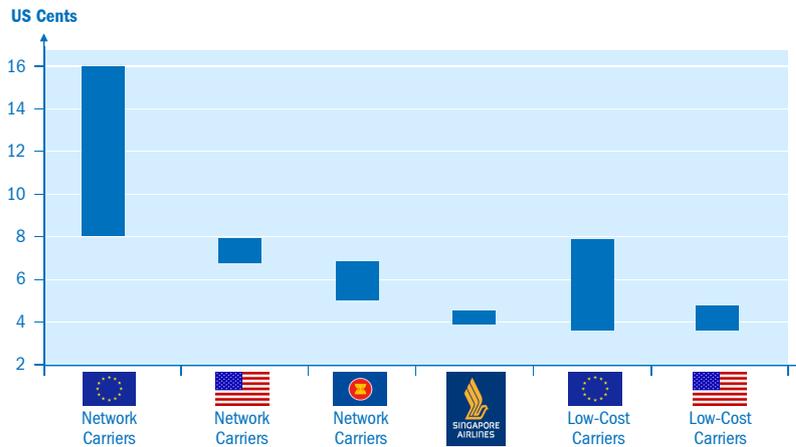
During the last 10 years, a trend towards growth in regional airports could be observed. Mainly driven by low-cost carriers that benefitted from cheaper landing fees, previously unused airports were integrated into the route system. In the future, this trend may turn around as growth returns to traditional large scale hubs. With larger aircraft such as the Airbus A-380, major airports can be served very economically. In contrast, regional airports have mostly reached their capacity potential. With restrictive investments by local governments due to high indebtedness, further capacity increases are unlikely. In addition, the catchment area of local airports is increasingly overlapping, so that further passenger growth could only be generated by cannibalization from other regional airports. This development poses an opportunity for network carriers as a shift towards large hubs favors their traditional "hub & spoke" system – at the same time this might bear further risks as also low-cost carrier will focus their future growth on the primary European catchments.

Challenges

Global cost pressure

One of the most important challenges European network carriers are facing today is the competitive pressure to reduce their cost base. In comparison to international rivals, European network carriers have significantly higher cost per available seat kilometer. This is not only true with regard to their low-cost competition but also compared to network carriers in the United States and in Asia. Particularly interesting is the position of Singapore Airlines, which is shown in figure 11. The company manages to combine a favorable cost structure with one of the highest service levels in the industry. This exemplifies that European network carriers are stuck. Almost all international competitors have lower cost and some even offer better service to their customers. Certainly some of the cost differences displayed below are due to the route system of the respective airlines. Still, the overall divergence remains representative.

Figure 11: Cost comparison of international airlines
 [US ct per flown seat kilometers]



Source: Harvard Business Review (2010)²⁷⁾

New global competitors

A further challenge for European network carriers is the growing international competition, especially from Middle Eastern and Asian airlines. Emirates recently announced the purchase of a further 32 Airbus A380 and 30 Boeing 777 for a total of 21.6 billion US\$, adding to an already impressive order book. The vision of making Emirates the world's biggest airline with Dubai as the major hub for international air travel is well underway²⁸⁾. And despite the rapid growth, Emirates manages to earn money.

In 2010, Emirates is set to become the most profitable airline worldwide²⁹⁾. As mentioned above, also Singapore Airlines is extremely well positioned in the global competition. Its hybrid strategy enables the company to offer high quality services to its customers at extremely low operating cost. Singapore focuses on investments in everything that benefits the customer while at the same time being extremely efficient in support and back-office processes. The two examples show that global rivals pose a serious threat to the future competitiveness of European network carriers.

4. SCENARIOS FOR EUROPEAN NETWORK CARRIER IN 2015

Based on the starting conditions in 2010 as well as the general outlook for the airline industry described above, we have created four scenarios which describe possible future states of the industry in Europe in 2015. These scenarios depend in particular upon the future development of two key uncertainties – the regulation of the industry in Europe as well as the price sensitivity of the customer base (see also figure 18). We have named these four scenarios "Europe under Siege", "Network Fortress", "Decline of Champions" and "New Horizons". They are described in the following, first in brief and then in more detail.

Figure 12: Future scenarios for the European airline industry



Overview

❖ **Network Fortress** describes a future, in which the European network carriers have regained a strong competitive position in both the long-haul and the intra-European market. The recession of 2008 and 2009 was followed by a quick economic recovery, which allowed corporate travel budgets to increase again in 2012. In turn, the demand for low-cost travel stagnated in favor of high quality and convenient travel, which led to growth in the more profitable business and first class segments. The growing long-haul market connecting Europe with the booming ASEAN region and China is dominated by European airlines. Competitors from Asia and the Middle East have only limited access to the European market due to restrictive traffic rights legislation, meaning European airlines could operate from a largely protected home market.

❖❖ **Europe under Siege** describes a world in which Asian and Middle Eastern competitors dominate the future of European network carriers. Despite growing business travel based on solid economic growth in Europe, the industry faces severe competition, also in its home market. However, low-cost carriers have not been able to continue their growth seen in the first decade of the new millennium as customers became increasingly aware of the total cost of flying low-cost. 'New World', a new alliance by Middle Eastern and Asian airlines was formed in 2012 focusing on capturing the growing demand for high quality air travel around the world. The alliance also partners with a major European airline to gain easier access to the attractive European market. With their new fleet and superior service offering, the alliance has quickly gained market share and is expected to continue its growth.

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Detailed description

Network Fortress

08.09.2015 – *European network carrier stocks on five year high.*

Throughout the recent reporting period, European network carriers have announced record profits. According to industry experts, this development is mainly caused by the rising demand for business and first-class tickets on routes to Asia and South America. Also intra-European routes increasingly contribute to the companies' performance. From 2012 onwards, the formerly highly praised low-cost carriers began to lose much of their market share to network carriers. Following the economic upswing, especially business customers focus on convenience and quality rather than price, when booking flights.

Experts see the successful restructuring of European network carriers as well as the favorable economic development as the main factors triggering this development. The period of growth that followed the heavy recession in 2008/2009 increased the global demand for air travel. After the near bankruptcy of Greece in 2009 and the growing fear of financial distress of economies like Spain and Italy, the G20 agreed on strict global financial market regulations on their summit in Johannesburg. These regulations stabilized the sector and built the foundations for a global economic recovery. Starting in 2010, Europe as a whole and especially countries like France, Germany and the United Kingdom could return to average positive GDP growth rates of 2%. This growth was carried by several industry segments among which the renewable energy sector played a particularly important role. Early investments in this new technology paid back as particularly Germany was well equipped to satisfy the increasing global demand for green energy. This demand mainly originated – apart from Europe – in Asia and South America, the global boom regions, with constant growth rates close to 10%.

In addition, the global economic crisis which had put many airlines to the test until the end of 2010 led to largely unanticipated positive long-term effects for network carriers. The decreasing revenues and profits in the sector imposed the start of restructuring programs in order to decrease the cost base and secure profitability. By renegotiating wage agreements and putting a stronger focus on efficiency improvement, operational excellence and product as well pricing innovations, the cost base of many airlines could be substantially reduced without decreasing service quality. This paid out after the recession, as European network carriers could offer a higher quality and service level compared to their low-cost rivals at competitive pricing.

Corporate travel budgets that had been severely cut during the recession increased again after 2010. The ensuing growing demand for business travel led to rising sales of the highly profitable business and first class segments of European network carriers. Clients increasingly demanded high quality in their travels and were less willing to sacrifice convenience for price. This gave established European network carriers an edge over low-cost carriers in intra-European competition, which had suffered from decreasing market shares since 2011.

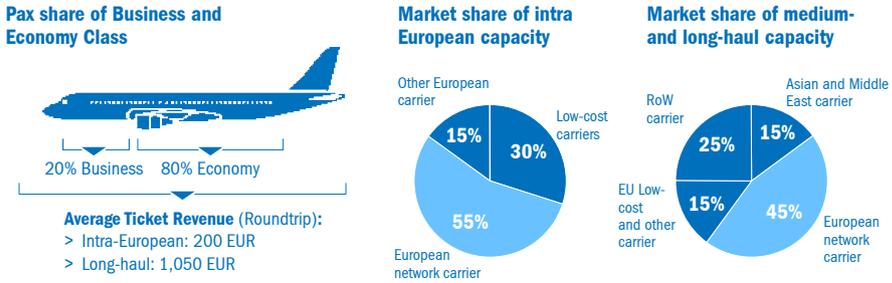
At the same time, the long-haul market for air travel to and from Europe is dominated by European network carriers. The fear of a global dominance of Asian and Middle Eastern carriers, which was prevalent among the management of European airlines in the first years of the decade, did not prove to be justified. Following the restructuring efforts of European network carriers not only the cost base of these companies was reduced but also more cash was available to invest in improved equipment and service offerings on long-haul flights. In 2014, two of the four airlines, which received a 5 star rating by Skytrax were European. This strong position further increased the positive perception of customers, who appreciated the new service level especially in business and first class. Despite high investments in new aircraft and service features Asian and Middle Eastern airlines could not continue their ambitious growth plan and were unable to significantly expand within the European market. Today, these companies only play a minor role in the long-haul market to and from Europe with a combined market share of 15%.

Apart from the higher service level and better product offering of European Network carriers, this development was also made possible by a strict re-regulation of the airline industry in Europe. In 2012, the European Union announced a revision of the “Agenda for Freedom” that was signed in 2009 and supported a stronger international liberalization of the airline industry. The newly drafted “European Aviation Act” introduced stricter regulations on traffic rights and airport slot allocation in Europe that strongly supported European carriers and prevented foreign ownership of European airlines. Asian and Middle Eastern airlines therefore had to focus on other markets such as intra-Asian routes or connections to the Americas.

Political analysts saw this step of the European Commission as a logical continuation of rising political trend for increased protectionism in Europe. Growing concern about the Asian dominance in the world economy motivated many politicians to try to protect home companies from overseas competition with a particular focus on ownership rights in order to prevent the loss of intellectual property.

This combination of increased protectionism of the European market, a strong demand for high quality service offerings and steady global economic growth together with a solid and competitive cost base of European network carriers has lifted the stocks of European aviation companies to record highs.

Figure 13: Scenario fact sheet: Network Fortress



Scenario Description

- > Economic crisis of 2008/2009 has been quickly overcome
- > High demand for highly profitable business and first class segments
- > Long-haul market from and to Europe is dominated by European network carriers
- > Low-cost carriers stagnating and playing a minor role in intra-European travel

Europe under Siege

08.09.2015 – *Business travelers choose New World Alliance*

"New World Alliance" continues its unique success story and plans to prolong its ambitious growth plan in the fourth year after the foundation in 2012. "Our goal is to keep growing in the double digits in terms of passenger numbers on our routes connecting Asia and Europe", said the alliance's CEO. This puts enormous pressure on established network carriers in Europe. Despite their recent accomplishments on intra-European routes, where they could stop the growth of low-cost carriers, established network carriers have not yet found a strategy to compete on the long-haul market.

The dominance of the alliance on long-haul flights rests on the liberalization of the European airline industry as well as the global economic power of Asia and the Middle East, which are home to most of "New World's" member airlines. These countries originated as the dominating growth regions after the global economic crisis of 2008/2009, starting the development towards an "Asian Century", which many Western experts had predicted even before the global crisis. However, despite the high growth in Asia and the Middle East, also Europe and the United States could return to moderate growth rates after the crisis based on economic reforms as well as exports to Asia.

Business travel grew strongly due to the positive global economic development. Customers increasingly focused on premium services as travel budgets, which decreased drastically during the crisis, were gradually raised again. The founders of "New World" picked up this trend when they established "the world's five star alliance" in 2012. By clearly focusing on superior service for the growing segment of business clients, the alliance consisting of four Middle Eastern and Asian airlines quickly gained market share by connecting Europe to the centers of global economic growth.

In addition, "New World", originally focusing on hubs in Dubai, Singapore and Hong Kong received wide access to the European market in late 2012. By partnering with a large European airline, the alliance was able to further increase its growth. The member airlines could both secure their access to the attractive European market and fully benefit from the liberalization of the European airline industry that started in 2013. The extended open skies agreements between ASEAN, Middle Eastern countries as well as China and the EU was celebrated by politicians as a sign for the good economic and political relations between the countries. It not only granted traffic rights to Asian and Middle Eastern airlines but also enabled a direct ownership of European airlines by foreign investors.

After this agreement was ratified, the European partner airline was acquired by one of the Asian "New World" members, which secured a central European hub for the alliance's network. New slots in other European airports were used to build an enhanced route system within Europe with the newly formed business class only brand "New World Airlines". This created the basis for the current success of the alliance, which many experts expect to be sustainable. "Other established European network carriers can hardly compete with the new fleet, superior service offering and convenient connections within Europe" one industry analyst summarizes.

Despite the fierce pressure from "New World", established European network carriers still have a strong competitive position on intra-European routes. Business clients appreciate the quality of their offering compared to low-cost competition and are willing to pay for this extra service. While during the crisis many companies urged their employees to fly low-cost, these clients today have returned to the business class of European network carriers. Also in economy class, European network carriers have lowered their fares, which has attracted many former low-cost oriented customers. This was possible due to successful restructuring programs during and after the financial crisis that significantly reduced the cost base of European network carriers.

In contrast, low-cost carriers have not been able to continue their growth as seen in the first decade of the new millennium. They are operating in the market segment of price sensitive private customers, where experts expect no further growth in the coming years. Growth rates and market penetration of low-cost carriers peaked in 2010. Starting in 2011, market shares started to decrease as customers were no longer willing to adjust to the low service provided by budget airlines. In addition, consumers became increasingly aware of the total cost of flying low-cost and were less impressed by the "headline fares", which were heavily advertised. As network carriers had lowered their fares in the economy class, they were perceived as a true alternative to budget airlines. A recent consumer survey found, that the additional service that these airlines offer clearly outweighs the slight price premium they charge over low-cost carriers.

Future challenges for the intra-European business of network carriers could, however, arise from "New World". Many experts believe that the successful launch of the European business class only brand may significantly increase competition in the highly profitable premium segment and decrease the market share of European network carriers.

With "New World" dominating the long-haul market from and to the new boom regions in Asia as well as the Middle East and increasingly pressuring established carriers in their former home markets, European Carriers have to react before additional acquisitions or partnership agreements by "New World" further increase its market power in Europe.

Figure 14: Scenario fact sheet: Europe under Siege



Scenario Description

- > Economic crisis of 2008/2009 has been quickly overcome
- > New regulation between Asia and Europe opens traffic rights and ownership possibilities for Asian and Middle East carriers
- > Long-haul market between Asia and the European Union is dominated by Asian carriers
- > Low-carriers stagnating and playing a minor role in intra-European travel

Decline of Champions

08.09.2015 – *European network carriers struggle for survival*

Many European network carriers are on the brink of bankruptcy. "Fierce competition from Asian competitors, stagnating economic growth in Europe and decreasing market shares in previously highly profitable business segments have substantially decreased European network carrier's cash flow and profits over the last 5 years", says one industry analyst. Low-cost airlines in contrast have reported record sales. With new routes and an expansion of their long-haul network, they continue to gain market share in both the business and leisure segment.

All airlines in Europe are still facing an extremely difficult macroeconomic environment. Different from what economists had predicted in 2010, GDP growth has not exceeded 0.3% on average over the last five years. In some countries like Spain economic performance has even decreased over the last 3 years. The economic crisis of 2008 and 2009, which originally eased off in 2010, continued as Spain lost its investment grade rating in early 2011 due to its high debt level. Financial markets became increasingly nervous, which was amplified by rumors that even countries like the USA may default on their debt. Increasing private and public debt levels and a lack of decisive political reforms to counteract the crisis has left European economies with high unemployment and indebtedness. Also the United States moved into a heavy recession in 2011. Increased amounts of debt from company bailouts and the implemented health care reform led to severe tax increases, reducing consumption significantly.

The negative economic development put severe pressure on corporations to cut cost, which translated in continuously decreasing travel budgets and a reduced total travel volume. Business trips were reduced to a minimum. If managers travel today, they travel low-cost. This goes in line with the recent findings of a consumer survey which found that a shift in the mindset of both business and leisure travelers can be observed. Today, price is by far the most important buying criteria for both target groups. Low-cost airlines benefited strongly from this development and were able to increase their market share in Europe to 45%.

Also European network carriers try to adjust to the increasing price sensitivity of customers. Many intra-European routes, which used to be controlled by European network carriers, are now serviced by newly established low-cost subsidiaries. However, network carriers are still unable to meet the prices of their low-cost competition due to their cost structure. Despite decisive attempts to restructure, the strong influence of unions prevented cuts in personnel expenditures and rendered structural adjustments impossible. Unit cost thus remained high in both the established business as well as low-cost subsidiaries.

In spite of the current economic situation in Europe, global GDP has grown by 4.6% p.a. as recently announced by IMF. This growth is driven by Asian economies. Even with lower demand from Europe and the United States, China has achieved a constant double digit growth rate which was mainly based on exports to other Asian countries and a stable domestic market. This impressive growth, however, is not limited to China. Also economies like Malaysia, Singapore, Vietnam and, in particular, Indonesia add to this positive development with average growth rates of around 8% p.a. As European and American companies had not been able to grow significantly in their traditional western home markets any longer, many increased their investments in Asia. Based on these high foreign investments and their rich domestic sources of raw materials, China and the ASEAN countries dominate the world economy forming a market of 1.7 billion people. That is almost twice the size of the European Union and NAFTA combined. Experts predict the ASEAN region together with China to stay the dominant and most vibrant economic zone for the next decades.

The dominance of the emerged Asian economies is reflected in today's aviation market. Compared to European network carriers, Asian airlines are flourishing. The positive market development in Asia enabled the companies to grow sustainably and to boost investments in their service and fleet. On long-haul flights to and from Europe, they could expand their offering significantly and increase their share of the long-haul European market to almost 30% by attracting former customers of European network carriers.

This development started in 2011. Backed-up by steady revenues from their home markets, Asian and Middle Eastern airlines lowered their prices for routes to and from Europe. Customers were happy to get access to the award winning service of these airlines for comparatively low fares and turned their back on European network carriers. These reacted by calling for stronger market regulations in order to secure their position in Europe.

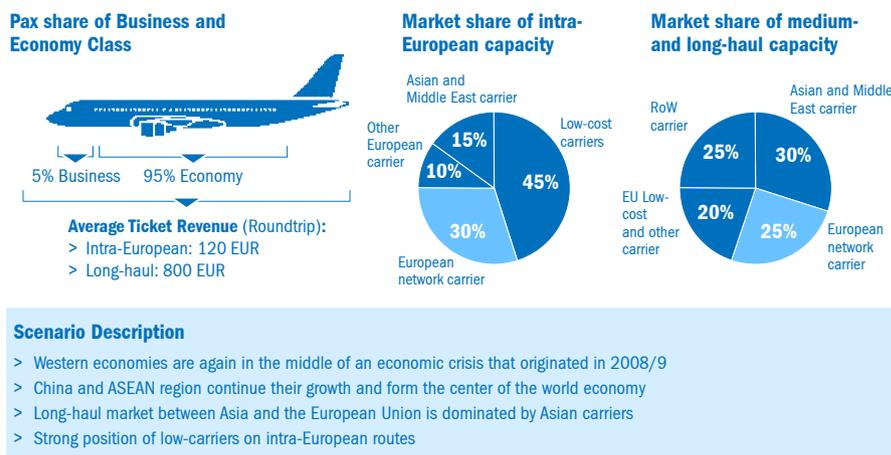
However, the opposite happened. Due to the strong reliance of Western economies on Asian growth regions, the European Commission passed an extended open skies agreement between the EU and China as well as the ASEAN countries. In early 2013, European governments could no longer ignore the Asian governments' call for liberalization as pressure on the Commission was steadily increased by threats of protective tariffs for European exports to China. The agreement granted full European traffic and ownership rights to companies based in China or one of the ASEAN countries.

The first Asian carrier bought a European hybrid airline directly after the open skies agreement became effective. This enabled the company to further accelerate its growth strategy in Europe.

The competitive pressure from Asian airlines is intensified by low-cost carriers, which have started their own long-haul operations. By founding the new "Global X Alliance", a syndicate of four European and Asian low-cost carriers started flights connecting European and Asian capitals in 2012. This measure turned out to be the right step at the right time, as especially private customers have been using this service for low-priced holidays in Asia. "The growth rates have even surprised ourselves", said the CEO of a European low-cost carrier, "I feel reminded of the years when we started short-haul flights in Europe."

With hardly any means to counteract the pressure from low-cost airlines and the competition from Asia and the Middle East, European network carriers are expected to be the next in line calling for bailout money from their respective governments.

Figure 15: Scenario fact sheet: Decline of Champions



New Horizons

08.09.2015 - Low-cost airline launches frequent flyer and corporate program "Fly and Save More"

With the launch of the frequent flyer and corporate program "Fly and Save More", the first low-cost carrier reacted to the increased competition for business travelers on intra-European routes. Despite high market shares in this segment, low-cost carriers aim at expanding their revenues to further increase the pressure on network carriers and erode potential competitive advantages. Network carriers, though extremely well positioned on the long-haul market, still have problems competing with the cheaper competition within Europe.

Low-cost airlines, once dismissed by their established competitors, have turned out to be the most widely chosen alternative for business travelers on intra-European flights. With Europe and the United States still struggling with the aftermaths of the economic crisis of 2008/2009, corporate travel budgets have been cut drastically. Bailouts for corporations as well as other countries had substantially increased the debt level of all western economies. In order to decrease this indebtedness, taxes were increased, which in turn slowed down economic growth which was never to exceed 1% over the last 5 years.

For business travelers this translated into opting for economy instead of business class on long-haul flights and low-cost instead of network carriers on short-haul flights. Also leisure travelers have increased their orientation on price. With less disposable income due to higher unemployment and tax rates, travelers focus on cheap fares and are less concerned about additional service offerings provided by the airlines.

In this market environment, low-cost carriers additionally focus on corporate travelers and especially frequent flyers. For this attractive target group, the first low-cost frequent flyer and corporate program was launched to further increase market share in this highly profitable segment. Network carriers in contrast are struggling with decreasing market shares as they cannot offer prices comparable to low-cost airlines to their clients. Despite moderate restructuring successes, unit costs are still comparatively high, as especially personnel cost could not be decreased. "In an era of high unemployment and decreasing real wages, we have the obligation to fight for our colleagues. High quality work has to be paid adequately", explained a European network carrier union representative.

While low-cost carriers dominate the intra-European market, network carriers were able to secure growth in the long-haul market, which also increased the utilization of feeder connection to and from hubs. Demand for long-haul flights connecting Europe, the United States and the ASEAN region as well as China has been growing strongly in the last years, making these routes the most attractive ones in the industry. The rise of Asia to become the global center of economic growth has continued throughout the decade, which made local presence a necessity for western businesses. In contrast to what many market observers had expected in 2010, European network carriers were able to capture a large share of the growth on routes to Asia, which brought them into a strong position compared to their Asian competitors.

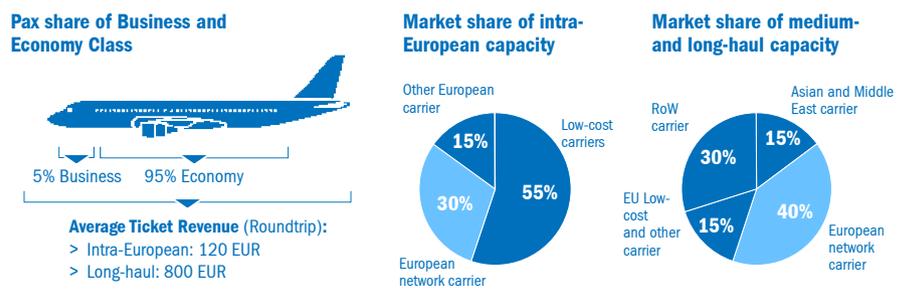
Strict new regulations in Europe and a growing sense among customers to support home companies had enabled this development. In 2011, the European Commission decided upon strict regulations for the European airline industry. With economic growth stagnating, protectionism was seen as a potentially successful measure to shield European companies from cheaper competitors around the world. Among a number of protectionist measures, the commission enacted the "European Aviation Act", which strongly limited traffic rights for companies from outside the EU and banned minority ownership of foreign investors. Today, this step has proved to be successful, at least for European network carriers. With a market share of 45% they have a strong position in the long-haul market.

Another factor determining this strong position in the long-haul market is the fact that many European customers simply prefer European airlines over their Asian competitors. A recent consumer study has shown that this buying behavior is mainly due to a growing sense and obligation to support European companies thus strengthening the home economy and safeguarding growth and jobs in Europe. "The increasing fear of an Asian dominance in the world economy and job losses, which many have experienced, has created a 'buy-European' attitude among many consumers", the author of the study explained.

Asian and Middle Eastern airlines could thus not extend their growth to the European market and focused investments on other markets such as the Americas and intra-Asian routes. This successful strategy has generated high profits and cash flows for the airlines and strengthened their ambition to continue growth on a global basis. "We want to be the world's largest and most profitable airline" an Asian airline CEO said in Singapore. "We can be cheaper and offer better service than our European competitors. A liberalization of the market in Europe would thus be beneficial for customers", she adds. Experts expect growing pressure from Asian governments to revise the "European Aviation Act" in order to enable fair competition in the global aviation market.

With strong rivalry from low-cost airlines in Europe, network carriers are earning their profit in the long-haul market to the boom regions in Asia and the Middle East. However, their favorable market position is largely determined by the protective legislation of European governments. Should the Asian pressure lead to a stronger liberalization of European aviation, market conditions may change drastically. European network carriers are well advised to prepare for this.

Figure 16: Scenario fact sheet: New Horizons



Scenario Description

- > Western economies are struggling with the aftermath of the economic crisis that originated in 2008/9
- > High demand on routes from and to the new global boom region: China and ASEAN region
- > Long-haul market between Asia and the European Union is dominated by European Network Carriers
- > Low-cost carriers dominate European short-haul flights, also in the business traveler segment

5. STRATEGIC IMPLICATIONS FOR EUROPEAN NETWORK CARRIER

The four scenarios described above are not to be understood as predictions of the future development of the airline industry. Instead, they describe realistic alternative pictures of the state of the industry in Europe in 2015. Common to all scenarios is the far-reaching scope of changes to be expected. It is therefore essential for European network carriers to start preparing today. In this chapter we thus highlight a few strategy implications for respective players. Detailed strategy recommendations, however, can always only be derived in the light of the specific situation of each individual company.

When assessing and comparing the strategy implications for the four scenarios, one can identify those recommendations that are common for all four scenarios as well as those that are specific for just one or a few of these scenarios. The common strategy recommendations form the basis of a core strategy, which European network carriers can start pursuing today independently of the exact future development of the industry. This core strategy is complemented by scenario-specific strategic options, which are realized if specific developments of the environmental conditions come true.

The core strategy for European network carriers focuses on continuing restructuring and efficiency improvements to decrease cost and simultaneously increase service and quality level in order to remain competitive in comparison to Asian and low-cost carriers. To achieve this, personnel and operating cost need to be trimmed further. In addition, further investments in service quality and product innovation have to be made. This way, a hybrid strategy can be followed that allows investments in everything the customers see and cost saving as well as efficiency increases in back office and support processes.

In our scenarios, we have shown the enormous impact that changes in the European regulatory environment can have for European network carriers. Giving foreign airlines unreasonable access to the European market sidelines European network carriers and strongly hampers their growth prospects. Lobbying national and European bodies to constantly re-assess the advantages and disadvantages of liberalization remains top priority for European airline managements.

This core strategy has to be complemented by scenario-specific strategic options which are briefly exemplified for the scenario 'New Horizons'. In this scenario price sensitivity of customers has increased and a favorable regulatory environment in Europe prevents pressure from new international competitors. For these circumstances one strategic option promises positive results. European network carriers should increase their presence in the growing Asian market to become less dependent on Europe. For this, acquisitions of Asian airlines or an expansion of alliances or joint ventures seems promising.

The details of each scenario-specific strategy option certainly differ for each company, depending on its specific core competencies and positioning. These options thus have to be defined for each company individually. The robust core strategy, however, is applicable for all European network carriers and only needs slight company-specific modifications in terms of the specific focus of the restructuring plan. As European network carriers will be jointly affected by the negative or positive implications of regulation, joint steps need to be taken to ensure favorable competitive conditions for the European airline industry in the future.

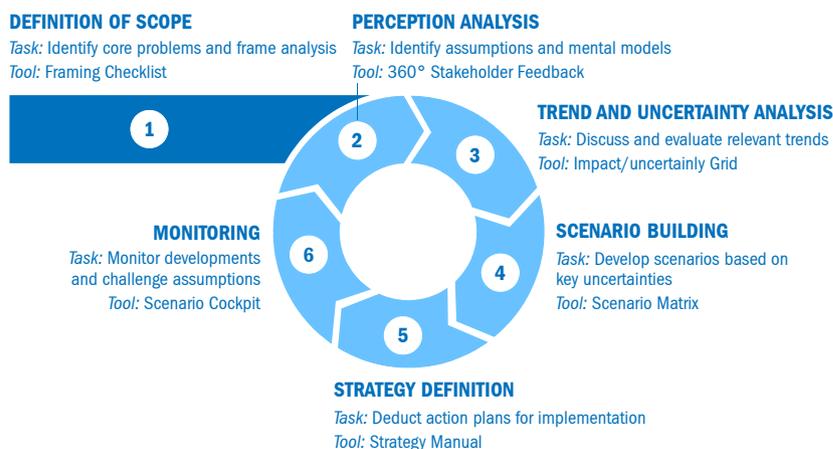
6. METHODOLOGY

HHL-Roland Berger approach to scenario-based strategic planning

Our scenario study is based upon the approach to scenario-based strategic planning that was jointly developed by HHL and Roland Berger Strategy Consultants. The approach does not only allow creating scenarios but also enables companies to integrate scenarios into their strategic planning processes.

Our approach consists of six process steps for each of which we have created a specific tool that eases business planning with scenarios in practice. The approach thus enables managers to plan for multiple options. At the same time, it allows managers to integrate and align external and internal perspectives to challenge existing assumptions and mindsets³⁰.

Figure 17: HHL-Roland Berger approach to scenario-based strategic planning



Source: Wulf, Meissner, Stubner (2010)

Application for industry scenarios

The HHL-Roland Berger approach, though originally developed as a strategic planning tool for individual companies, can also be applied for the purpose of creating scenarios for the future development of different industries or countries. For this, only the first five steps of the approach are followed. Phase six, in which company specific strategies and environmental developments are constantly monitored, can in this case be omitted.

Description of process steps

Definition of scope

In step 1 of our scenario development process, we define the project scope. Experts of our Center for Scenario Planning and project partners meet to agree upon the core goal of the project. This includes identifying core problems and framing the analysis. Our Framing Checklist tool makes sure that every important aspect is covered and that all project partners share a common understanding of the steps ahead.

In order to create the four scenarios for the European airline industry we applied this Framing Checklist. We defined the goal of the analysis to be the development of industry scenarios for the European airline industry until 2015. The industry itself is very diverse and companies vary significantly with regard to their business model. Therefore, this study specifically focuses on the passenger transportation segment of traditional network carriers. Cargo and low-cost airlines are excluded from the scenario analysis.

Perception analysis

In step 2 of our scenario development process, we apply our 360° Stakeholder Feedback tool in order to examine the assumptions and underlying mental models of different players in the industry as well as of external stakeholders. This reveals possible blind spots and weak signals.

In order to analyze the important influence factors of the European airline industry, we used the 360° stakeholder feedback tool. For this, we sent out two questionnaires to managers of major airlines in Europe as well as to external industry experts from research institutions and consulting companies to get an overview on their assumptions as well as the trends and factors they considered important for the future of the industry. The internal view on the industry was represented by several major European airline companies from the network carrier segment, which together accounted for more than 40 percent of the total sales revenues of the European airline industry. The external view on the development of the industry is represented by prestigious German research facilities and experts from different leading consulting firms.

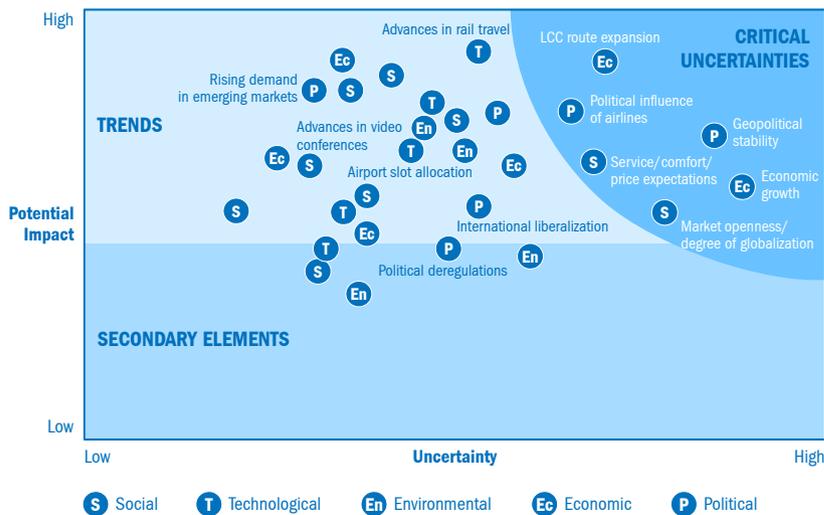
The survey was designed to capture a holistic picture of the relevant political, economical, environmental, social and technological influence factors in the European airline industry. For this, we first sent out an open questionnaire with blank spaces in the respective dimensions to give the study participants the opportunity to name factors that they considered particularly important for the future development of the industry. These factors were then clustered and sent out again in a second questionnaire, in which participants were asked to evaluate the identified influence factors with regard to their impact and uncertainty.

Trend and uncertainty analysis

In step 3 of our scenario development process, we determine and analyze trends that are likely to impact the project partner in the future. With the help of our Impact/Uncertainty Grid tool, we cluster the trends according to their degree of impact and their level of uncertainty. Factors which score high on both dimensions are then transformed into 'key uncertainties', the basis of the next step in our scenario development process.

For the scenario generation in the European airline industry a workshop with specialists from the HHL Center for Scenario Planning was conducted. In this workshop, different influence factors that were gathered and rated by the experts in the previous process step were transferred into the Impact/Uncertainty Grid and clustered into critical uncertainties, trends and secondary elements (Figure 18).

Figure 18: Impact/uncertainty grid for the European airline industry



An important task of this workshop was the identification of two key uncertainties which built the basis for the scenario development in the next process step. For this we clustered three and two related factors respectively into two meta-categories, which we call key uncertainties or scenario dimensions. The first scenario dimension is a cluster consisting of three critical uncertainties. These are:

- ❖ Low-cost carrier expansion in terms of routes and services
- ❖ Economic growth; and
- ❖ Service/comfort/price expectation

Changes in each of these factors have a significant impact on the importance of low-cost carriers in Europe and the future of network carriers. Thus, together they form the scenario dimension **"Price sensitivity of customer base"**.

The second scenario dimension, "**Regulation of industry in Europe**" is a cluster consisting of two distinct critical uncertainties. These uncertainties are:

- ❖ Political influence of airlines; and
- ❖ Market openness/degree of globalization.

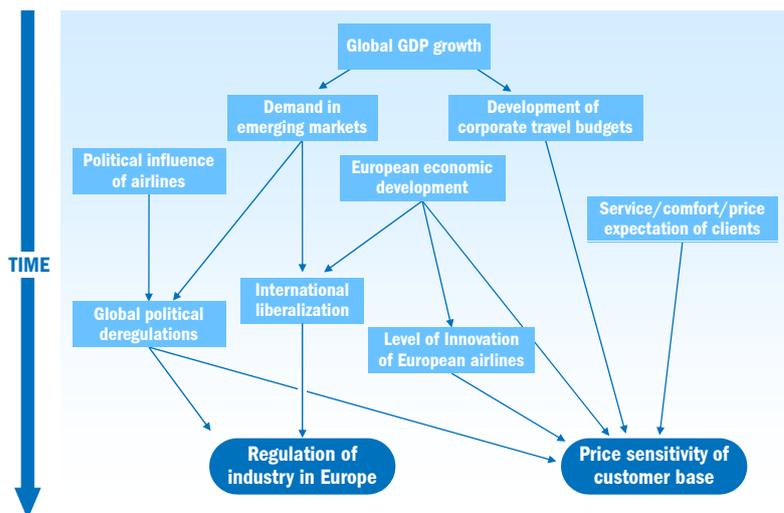
These two factors not only significantly influence the relative competitive situation of the European network carriers but also the airline industry as a whole.

Scenario building

In step 4 of our scenario development process, the scenarios themselves are created. Using the Scenario Dimensions determined in the previous step, we derive possible futures and describe them in detail. Typically, four plausible and distinct scenarios are developed. Our Scenario Matrix tool guides this process step. To speed up the process and to make the scenarios as accurate as possible, we also use the know-how of global scenario experts assembled in our Scenario network for this step.

In the present scenario project, the creation of the scenario matrix resulted in four scenarios for the European airline industry as described above. We named these scenarios "Network Fortress", "Europe under Siege", "Decline of Champions" and "New Horizons". In order to describe these scenarios in more detail, we created an influence diagram. This diagram displays the chain of causes and effects which lead to specific states of the two scenario dimensions. These influence diagrams formed the basis for the detailed description of the four scenarios presented above (Figure 19).

Figure 19: Simplified influence diagram for the European airline industry



Strategy definition

In step 5 of our scenario development process, we transform scenarios into action plans for implementation. With the help of our Strategy Manual tool, we derive detailed strategy implications for each scenario.

For the European airline industry we first assessed environmental and strategy implications individually for the four single scenarios. In a second step, we compared these recommendations in order to derive a core strategy. This core strategy was then complemented by scenario-specific strategic options. The details of each scenario-specific strategy option certainly differ between companies. They thus have to be defined individually for each company. The robust core strategy, however, is applicable for all European airlines in the network carrier segment and only needs slight company-specific modifications.

Monitoring

In step 6 of our scenario development process, we monitor scenario paths and adjust strategies if necessary. For this process step, we have created a tool called Scenario Cockpit. In the present analysis, however, this process step was omitted.

7. CONTACTS



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8. HHL CENTER FOR SCENARIO PLANNING

The HHL Center for Scenario Planning is jointly run by HHL – Leipzig Graduate School of Management and Roland Berger Strategy Consultants. It brings together internationally renowned experts in the fields of strategic management and scenario planning from both academia and practice. The Center's activities focus on four areas:

1. Research

We advance scenario knowledge by developing new methods and tools for strategic planning, researching the cognitive and behavioral effects of using scenarios in strategic decisions and developing new scenarios in a broad range of areas.

2. Teaching

We teach scenario planning to corporate managers and strategic planners in executive education seminars and workshops, PhD candidates in summer seminars and MBA and MSc students at HHL studying strategic management.

3. Consulting

We advise corporate, public and civil organizations on how to set up scenario planning structures and processes, review and adapt existing planning processes and communicate effectively to all stakeholders in times of uncertainty.

4. Networking

We provide a platform and act as a facilitator to bring together scenario experts from all over the world, bridge the gap between theory and practice and share ideas on what the future will look like.

Further information on the Center is available at www.scenariomanagement.de.

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