NEXT-GENERATION GLOBAL AIRLINE ALLIANCES

Composite Low-Cost Carrier Networks

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Section

1

Introduction

As low-cost carriers build market share, development of low-cost alliances will fortify low-cost networks, stymie legacy competitive responses and generate new growth.

Today's low-cost carriers represent a fundamental change in airline industry economics. Through the mid-1990s, low-cost carriers were niche, leisure-focused airlines with limited networks and frequencies. Over the past 10 years, new entrants have come to dominate sectors of the global market with low fares, high frequencies and good operational performance.

The low-cost phenomenon has thus far been focused solely on regional routes. While legacy airlines have struggled with low-cost carriers on these competitive regional routes, they have remained free from low-fare competition on intercontinental routes, where they compete only with one another and with rapidly growing service innovators.

Definitions

What are legacy carriers, low-cost carriers and service innovators?

Legacy Carriers

Mature airlines with high operating costs and complex networks. Today's legacy airlines fly complex fleets from large hub operations scattered across the country. Because most have evolved over decades, they have highly unionized labor and high costs. Most have complex fare systems but have the ability to provide travel from the smallest domestic markets to the largest international ones. Legacies are extending their control through alliances and anti-trust immunity. The prototypical legacy airlines are US-flag carriers, including United, American, Delta and Northwest, although former state carriers like British Airways, Air France and Lufthansa exhibit similar characteristics.

Low-Cost Carriers

Aggressive low-cost airlines offering low fares and frequent service. Today's low-cost carriers were founded after 1978, with one exception: Southwest Airlines. All offer low fares, frequent service and minimal onboard catering. Many operate from secondary airports

where their operating costs are minimized. Most are not unionized and have relatively low labor costs. Low-cost carriers include jetBlue, easyJet, Ryanair and, of course, Southwest Airlines.

Service Innovators

Young long-haul airlines with a clear focus on passenger services and amenities. Most of today's service innovators were founded in the last 20 years as dedicated international airlines, although several are national carriers that compete for niche markets. While most offer business and leisure focused services, they emphasize high-quality product, especially in the premium cabins. These airlines focus their attention and generate the majority of their revenues from their First and Business Class services. Their Economy services are often at par or only slightly superior to that provided by legacy carriers. Today's service innovators are rapidly expanding on long-haul international routes. Service innovators include Virgin Atlantic, Singapore and Emirates.

International Competition

Transatlantic competition has focused on product quality, not fares, especially for business traffic. Most airlines have held business class fares steady and lured business travelers with product enhancements. While legacy airlines have battled low-cost carriers in domestic and regional markets, they have also battled a new generation of service innovators on long-haul routes. Service innovators have expanded their international operations, connecting secondary cities across Europe and Asia to their hubs in London, Dubai and Singapore. Their service-oriented products are capturing high-yield business passengers in droves, driving high growth rates in the recent past and plans for explosive growth in coming years.

Shift from Domestic to International Flying

In 2004, legacy airlines announced shifts in capacity from underperforming domestic networks to profitable international routes. US legacy airlines will increase international capacity by 11 percent in 2004 alone, compared to a 3 percent increase in domestic markets.[1] United Airlines recently announced an additional 14 percent capacity increase in international routes during 2005, and Continental also announced a 15 percent increase for 2005.

Shifting capacity from domestic to international routes can be explained by three overall strategies:

1. Shifting capacity away from low-cost carrier price-based competition to international routes;
2. Bolstering hub positions by increasing network scope; and

[1] http://www.usatoday.com/travel/news/2004-10-25-international-usat_x.htm. OAG Data supplied by BACK Aviation Solutions.

3. Capitalizing on consumers' continuing willingness to pay a premium for international service, since there are no low-fare alternatives.

While the legacy airlines believe that shifting exposure to international sectors is in their long-term interest, in reality it is short-sighted. While legacies address basic cost problems inside and outside of bankruptcy court, few are addressing the core shift in customer preferences and problems in cost and revenue structures. Some smaller legacies, including Aer Lingus and Air Canada, are making fundamental changes to their cost and revenue equations in an effort to build long-term sustainability. But just shifting capacity ignores two inevitable developments in the competitive landscape that will emerge in the next five years.

Service Specialists

First, it is inevitable that service specialists, including Emirates and Virgin Atlantic, will build critical network mass, stealing high-margin business passengers on complex international itineraries from the legacy carriers. As flexible private companies with labor and fleet flexibility, these specialists innovate with new products and services. These service specialists will put pressure on legacies' high-margin premium positioning. As legacy cost-cutting impacts frequent flyer programs, business travelers are increasingly willing to try service innovators, especially for long-haul routes.

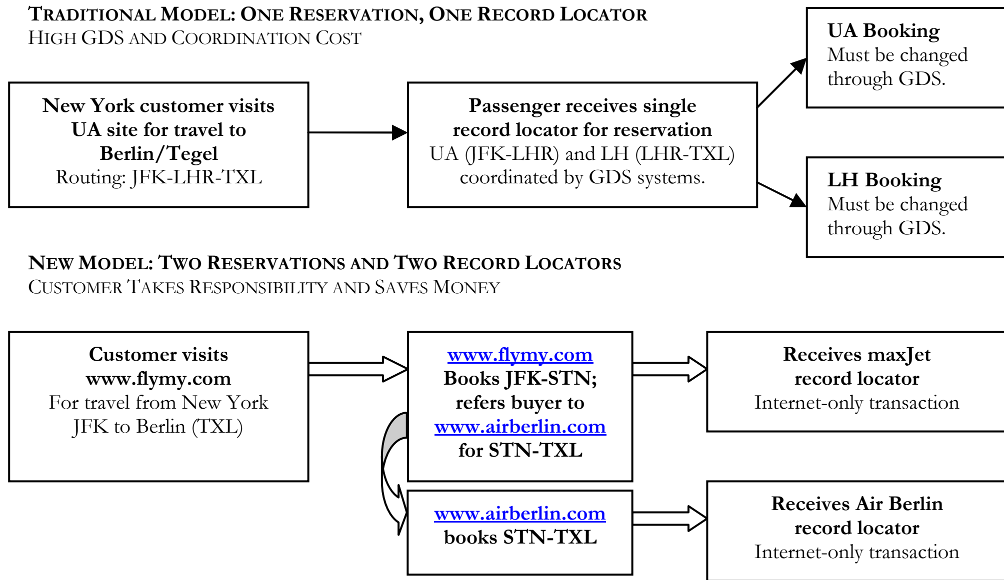
Composite Itineraries

Second, while specialists apply pressure on high-end segments, an emerging web of overlapping, regional LCC networks will capture price-sensitive business and leisure passengers. Frustrated by arcane legacy fare rules and restrictions on regional flights, value-driven customers are already booking itineraries that involve connections among low-cost carriers. Customers book these **composite itineraries** by visiting each airline's Web site and making separate reservations.

Composite itineraries are single itineraries composed of adjacent, separate reservations on two or more carriers. A composite itinerary consists of two or more record locators and usually carries a total fare consisting of the sum of each individual fare. Unless carriers have specific partnership agreements that provide connection assistance, passengers are responsible for their own accommodation if a trip is disrupted by a late arrival or departure, mechanical or other problem on either segment.

When traveling on a composite itinerary, customers must claim their checked baggage at each stop, clear customs and check in again. According to BAA surveys, more than 15 percent of passengers using London's Stansted Airport build their own composite itineraries with little organized guidance on how to do it.[2]

[2] BAA Stansted Traffic Data, July 2004.



COMPOSITE ITINERARIES

Composite itineraries simulate the convenience of a global alliance ticket while shifting connecting responsibility to the passenger in exchange for lower fares and fewer restrictions.

Low-Cost Carrier Collaboration

The reason for this collaboration is simple: customers will tolerate some inconvenience in return for low fares. This demonstrates that low-cost carriers can insulate themselves from legacy competition if they work together. Linking networks through low-cost carrier marketing agreements will happen quickly, especially between non-competitive intercontinental low-cost carriers and their regional counterparts. Since passengers must already clear customs and claim baggage at transit points, these partnerships do not require any change in traditional customer behavior.

These three factors make LCC collaboration possible and necessary:

Focus City Overlap

Low-cost carrier growth has caused focus cities (airports where low-cost carriers focus their operations with multiple routes) to overlap, opening transit points where passengers can flow from one carrier's network to another.

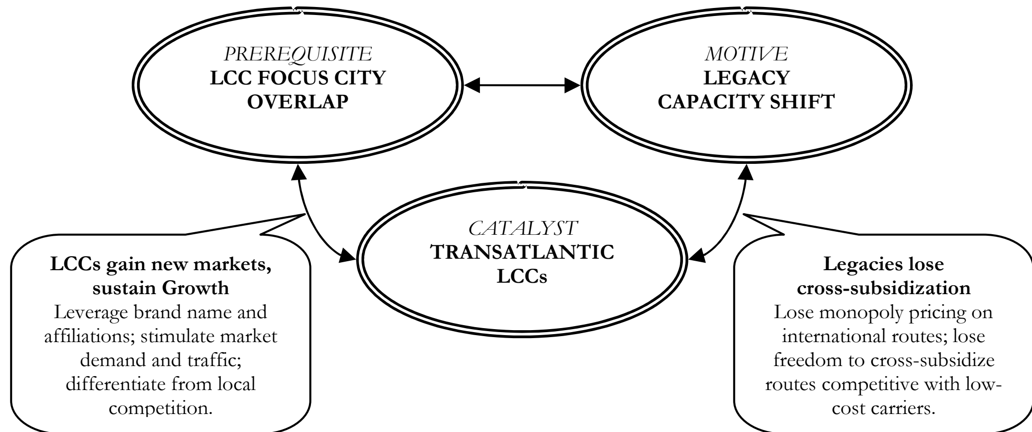
Intercontinental LCCs

New international low-cost carriers will emerge in 2005, linking focus cities in Europe and the United States.

Legacy Capacity Shift

Legacy capacity shifts from competitive domestic to non-competitive international routes will boost margins, allowing United States legacies to defend their domestic markets vigorously.

THREE FACTORS DRIVING LCC COLLABORATION



While the advantages for an international low-cost carrier in obtaining feed from regional LCC partners should be clear, the international partnership has a critical and short-term benefit for the regional partner. Unless today's regional low-cost carriers link their networks with tomorrow's international low-fare airlines, legacies will use monopoly profits from global itineraries to cross-subsidize losses on competitive regional routes. Low-cost carriers cannot allow legacy airlines to be the exclusive option for passengers flying from New Orleans to Berlin. Unless low-cost carriers enter into interactive marketing agreements and make customers aware of connecting options, the passenger in New Orleans is unlikely to realize available low-cost options for connecting inside Europe and will default to travel on legacy airlines.

The service innovators remain the wild card in predicting the shape of global alliances in the future. While low-cost carriers are likely to partner with other low-cost airlines that share similar operating methodologies, some may venture into feed agreements with service specialists. Business passengers may be willing to spend an hour on a low-fare carrier in order to fly on Emirates, Virgin Atlantic or other service specialists.

Coming Soon

It is certain that low-cost partnerships will emerge; what is not clear is how these partnerships will develop or in what form. Low-cost partnerships will evolve over time, starting with today's overlapping focus cities, maturing into sales partnerships where transit conveniences associated with legacy carriers – baggage transfer, interrupted trip expenses, etc. – are potentially marketed to passengers as extra-cost services. These global sales partnerships will translate into new corporate contracts for low-cost networks, offering global corporations low-fare travel options. Corporate travel has started to adopt LCC on regional routes, suggesting that adoption will continue on international routes as well.

Low-cost carrier partnerships answer another fundamental market question: where will future regional growth come from? With hundreds of new aircraft scheduled for delivery in coming years, low-cost carriers must chase new destinations and routes. Already aggressive pricing will tap out market stimulation, making it difficult to utilize new aircraft effectively. Partnerships grow markets with connecting passengers, enabling low-cost carriers to add frequencies and boost utilization. They also provide a competitive advantage over other low-cost carriers that stay focused only on regional traffic.

This growth and competition will trigger an identity crisis for legacies just as severe as today's imbalance between costs and revenues. No longer will legacies be able to boost international fares to match new intercontinental LCCs without severely impacting system wide profitability. But retaining high international fares without improving amenities only increases expansion by service innovators. Their fleet expansion and new markets will siphon away the high-yield passengers legacies must retain to survive a low-end attack. The more legacies rely on protected international routes to support competition with low-cost carriers, the more business passengers will be willing to try products from service innovators.

The legacy airlines will not become extinct. Legacies have protected markets that are immune from low-cost, low-fare competition and extensive long-haul networks that only they can reach. Slot-restricted airports – including Heathrow, Narita and Frankfurt – favor legacy carriers, since new competitors' entry is limited. Also, legacies serve smaller communities that cannot provide the traffic to support low-fare, low-cost service. This network feed can support the legacy fortress hubs, preserving legacy positions as dominant carriers in these cities.

Outside of these core fortress hubs, protected markets and small communities, legacies will come under harsh attack. United currently generates over half its revenues in regional markets where it competes directly with LCCs.[3] The double threat of high-end erosion from service innovators and low-end diversion by loosely coupled LCC networks makes shifting capacity into international markets short-sighted. This is especially relevant given that high-cost international routes are the least flexible for legacy carriers and staffed with the most expensive labor.[4] Legacy carriers assume that low-cost international carriers will not emerge, that low-cost carriers will not enter into global alliances and that there are endless amounts of customers who will tolerate exorbitant international fares.

All three assumptions are incorrect.

[3] Ito and Lee, *LCC Growth in the US Airline Industry*, 2003

[4] Because of legacy seniority systems, these are the highest cost routes for legacies to operate. International routes are preferred by senior staff since international flying minimizes the number of trips they must make.

Section

2

Competitive Changes

Changing competitive landscapes will force Legacy Airlines to compete with both Service Innovators and Low-Cost Carriers, making alliances among LCCs an important competitive defense.

To understand the urgency of low-cost alliances, one must first understand today's segmentation in the airline business. Airlines operate in two different competitive environments. **Regional** routes – defined as domestic and some short-haul international flights – are intensely price competitive, with flexible low-cost carriers accelerating growth at the expense of legacy airlines. Between 1990 and 2002, low-cost carriers increased their market share from 7.0 percent to 23.7 percent.[5] Low-cost carriers will exceed 30 percent market share by 2006.

In contrast, **intercontinental** routes are service competitive with little fare competition in an ongoing battle for premium services. Instead, legacy airlines face an escalating battle with their peers and service innovators to add amenities and seat comfort, all to capture a limited number of premium passengers.

Overview

In regional markets, legacies must cut costs to sustain market share at lower fares. In international markets, legacies must compete with service innovators by increasing costs and adding features to new Business Class and First Class products.

1. Legacy airlines and low-cost carriers compete for market share on the basis of pricing and frequencies. LCCs currently offer nonstop service in markets accounting for about 32 percent of major network carriers' revenues, and recent economic studies suggest that penetration will rise to 55 percent or more in the near future.[6]

[5] Darin Lee, LECG, http://www.brown.edu/Departments/Economics/Papers/2003/2003-12_paper.pdf

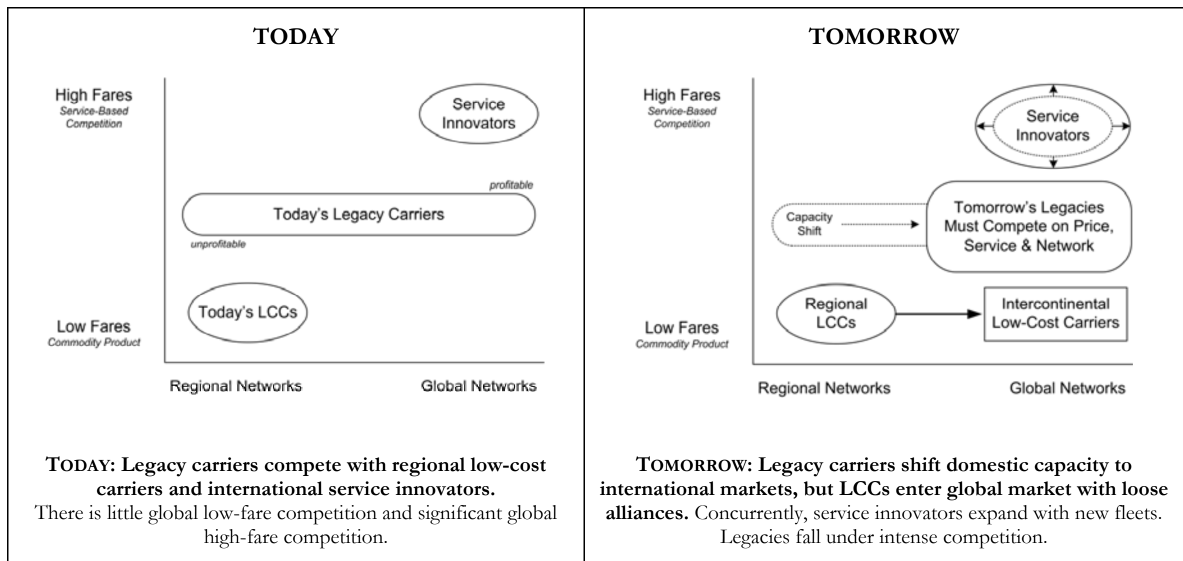
[6] Ibid.

2. Legacy airlines and service innovators compete for market share in intercontinental markets, where competition centers on seat comfort, airport amenities and loyalty programs.

3. In 2005, new low-cost, low-fare carriers will penetrate high-yield continental markets starting with transatlantic routes, while service innovators will continue their rapid fleet expansion and network growth. Because of the unique characteristics of international demand, where business demand is steady year-round and leisure traffic is highly seasonal, it is likely that intercontinental low-cost carriers will offer two classes of service and emulate service innovators' customer service focus.

In general, legacy carriers have been the network leaders, using their broad regional and intercontinental networks to capture passengers. Low-cost carriers have been price leaders, using their lean operating structures to capture price-sensitive business and leisure passengers. Service innovators have been product leaders, establishing market leadership for on-board services, amenities and comfort.

CHANGING MARKETS: MARKET COMPETITION TODAY AND TOMORROW



TODAY: Legacy carriers compete with regional low-cost carriers and international service innovators. There is little global low-fare competition and significant global high-fare competition.

TOMORROW: Legacy carriers shift domestic capacity to international markets, but LCCs enter global market with loose alliances. Concurrently, service innovators expand with new fleets. Legacies fall under intense competition.

Legacy Carriers

What are "legacy carriers"? Today's legacies can be defined as mature airlines with large, complex fleets and broad hub-and-spoke networks. For the past 20 years, the trump cards of legacy airlines have been their global networks and frequent flyer programs, factors that have encouraged multi-airline alliances that connect passengers around the world.

Key Characteristics

Legacy airlines share seven key characteristics.

Entrenched Labor

They have entrenched labor forces with mature seniority systems, and highly paid pilots, flight attendants and mechanics. This restricts cost-effective capacity reduction and the ability to evade new low-cost international competition.

Global Networks

They have both international and domestic operations, with major hub operations where passengers transit from domestic networks, often on affiliated regional carriers to long-haul flights. Most have affiliate agreements with unbranded regional airlines that provide feed from secondary communities at major hubs. At each hub, most legacies have preferential gate and slot positions that protect them from new market entrants. Inter-airline alliances integrate each legacy's network into a worldwide system, and anti-trust immunity protects them.

Complex Fleets

They have mixed fleet types to optimize capital resources across a wide variety of short- and long-haul routes. Most legacies operate both short- and long-haul Boeing and Airbus equipment, increasing maintenance and crew costs.

Complex Service

They have complex on-board service with at least Business and Economy Class services for both domestic and international routes. Most legacies operate at least five different cabin products across their networks.

Complex Distribution

They have pervasive, multi-channel distribution programs with extensive corporate contracts, Internet and telephone reservations. Legacy reservations and fare systems are based on global distribution systems that provide high-cost connections to travel agencies and corporate travel departments. Legacies have recently introduced Internet sites that connect consumers directly to their internal technology systems.

Loyalty Programs

They have loyalty programs with free flights, upgrades and status recognition that capture passengers. These programs have been downgraded in recent years, reducing their attractiveness to premium passengers.

Distorted Financials

Legacy carriers have extensive debt obligations that date from decades of unprofitable operations. Some have received government loan guarantees and others operate under bankruptcy court protection.

The strongest legacy carriers also exhibit significant route and airport protection, resulting from differential rates of liberalization around the world. Certain legacy

airlines enjoy wide access to key business markets, including London/Heathrow, Paris/CDG and Tokyo/Narita.

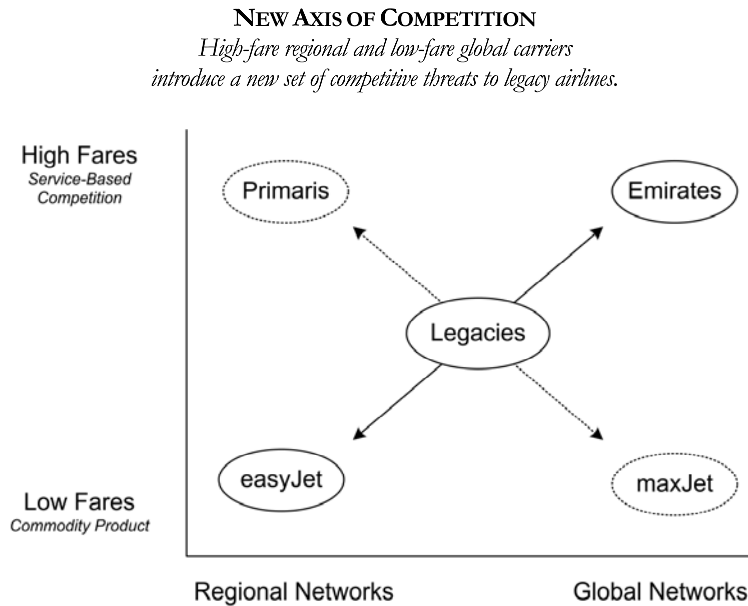
Network Strength

Over the past 60 years, legacy airlines have built their infrastructure and networks in protected environments. Deregulation in the United States happened just 25 years ago, and only in the past 10 years have low-cost carriers reached critical mass in key business markets. In Europe, the ascendancy of the European Union and liberalization of transportation regulations have opened new regional routes to low-cost carriers, resulting in more than 60 new entrants. Legacies are struggling to take high-cost infrastructure and optimize it for lower-revenue regional routes. They have used their networks, both regional and international, to withstand competition. But low-cost carriers now have the potential to replicate those networks in a new, less costly operating model.

In the next two years, new entrants will add a new axis to competition in the global marketplace. To date, competition has focused on low fare regional markets and service-competitive global markets.

NEW AXIS OF COMPETITION

High-fare regional and low-fare global carriers introduce a new set of competitive threats to legacy airlines.



Tomorrow, new high-fare domestic startups will target short-haul business passengers with flexible fare rules, moderate fares and amenities. Concurrently, new global low-cost carriers will capture price-sensitive business and leisure passengers.

The dynamic of competition will therefore be specialization. Until low-cost carriers and other new entrants develop a coupling strategy that neutralizes legacies' global network advantage, legacy airlines will be able to trump specialized carriers that emerge at the

high and low end of the market by retaining control over most international passengers. For example, United has recognized this trend and introduced two sub-brands to compete: P.S. provides a luxury regional service using a dedicated fleet, while Ted provides an all-economy product on short-haul routes to compete with LCCs.

Low-Cost Carriers

As price innovators, low-cost carriers exhibit the opposite philosophy to legacy airlines. They have younger labor forces, predominantly non-union. They choose specific operating models, perfecting a high-utilization route model with a limited number of aircraft types. Most pack seats onto each plane and simplify their on-board product with a minimum of free amenities.

Critical for reducing cost and building operating scale, low-cost airlines standardize their product to facilitate distribution and keep costs low. They distribute their simple, value-priced product through direct-to-consumer channels where they can build scale and reduce costs. Finally, they focus on routes and low-cost airports free from regulatory constraints, where they can build frequencies at will and divert passengers from nearby capacity-constrained airports.[7]

LCC Characteristics

Successful low-cost carriers have chosen narrow-body aircraft types, including the Airbus A320 series and Boeing 737 series. These aircraft are fuel efficient, match customer demand in key business and leisure markets, and are inexpensive to maintain. Boeing and Airbus have heavily discounted these aircraft to win business from low-cost carriers, making them financially productive assets. While cost-effective for regional routes, these aircraft do not have the operating range to serve intercontinental sectors.

Four factors have kept low-cost carriers focused on regional routes. Introducing intercontinental service would:

- Require a new, more complicated aircraft type with a different maintenance program tailored to the unique demands of long-haul overwater operations.
- Require foreign crew bases and complicate LCC's existing labor strategies.
- Require new technology and airport staffing to meet complex security and passenger handling rules.

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[7] Low-cost carriers focus on low-cost airports. While London's Heathrow Airport, considered the flagship destination for high-cost legacy carriers, charges between £16 and £20 per departing passenger, London's Stansted Airport charges about half of Heathrow's rates at retail pricing. easyJet and Ryanair pay substantially less than £6 per departing passenger.

- ❖ Divert focus from other profitable opportunities in existing markets.

In 2005, new low-cost carriers will enter the intercontinental space. The first, maxJet, has been optimized for international operations, with specialized widebody aircraft, overwater-focused maintenance programs and a custom-built technology platform. maxJet will commence operations in May 2005 with high-frequency service from New York to London. Other startup airlines have filed paperwork for an operating certificate, considering markets from the United States to Germany, France and Italy. These include Atlantic Express, Blackstar Airlines and Primaris. RivieraJet and Blue Fox were proposed but never developed. maxJet is targeting both business and leisure passengers with a two-cabin product. All startups other than maxJet are targeting only premium passengers with high-end seating and amenities.

NETWORK OVERLAP

The overlap of independent, point-to-point low-cost networks opens the potential for cross-selling and joint marketing. This is the first phase of low-cost global alliances.

Network Overlap

With these new entrants, overlap of domestic and intercontinental low-cost carrier networks will become pronounced. Most low-cost carriers concentrate their operations in high-value cities, connecting those airports to multiple cities on point-to-point routes. But as the global spread of low-cost carriers continues, multiple low-cost carriers are targeting the same focus cities.

While these carriers serve the same airports, they rarely compete on the same routes. At London's Stansted airport, for example, Iceland Express serves Reykjavik; Norwegian serves Bergen and Oslo; Air Berlin serves Berlin, Dusseldorf and Hamburg; easyJet serves Dortmund, Glasgow and a dozen other cities; and Ryanair serves Dublin, Prestwick and multiple secondary cities in Ireland and Europe.

Airports like Stansted are becoming more than just major gateways to key business and leisure destinations. They are becoming viable connecting stations where passengers can transit from one low-cost network to another. Today, colocation of local low-cost carriers has opened new regional composite itineraries. In 2005, new intercontinental low-cost carriers will connect regional colocation points like New York/JFK and London/Stansted, opening global composite itineraries.

Service Innovators

GROWTH OF SERVICE INNOVATORS

Rapid expansion by service innovators will capture the legacies' most profitable business passengers.

A third category of airline has emerged as **product** leaders. These **service innovators** will continue to expand their product-centric model at an aggressive pace.

Service innovators can be characterized by:

- ❖ A strong focus on delivering a premium, multi-class product based on style, comfort and distinctive service. Service innovators are continually adapting their on-board and airport amenities to capture market share.

- A strong focus on long-haul, intercontinental operations, where amenities and comfort are most valued. Service innovators are developing connecting hubs at major airports to open global itineraries and permit new spokes to secondary cities worldwide.

- A strong, flexible operating model made possible by non-union or relatively junior workforces, international cabin crews and pilots, limited fleet types, focused maintenance facilities and rapidly growing fleets.

Virgin Atlantic and Emirates are examples of service innovators:

- Both emphasize seat comfort and product innovation, with heavy investment in branding activities and differentiated service offerings.

- Both operate global networks focused on long-haul passengers but do not participate in multi-airline alliances such as SkyTeam or Star Alliance.

- Both have announced rapid fleet growth. Virgin Atlantic recently announced a $5.5 billion fleet improvement program, adding 26 wide-body aircraft in the next four years. Emirates plans to add 99 aircraft in the next 10 years, worth over $30 billion.

Both Virgin and Emirates will use their premium strategy and aggressive fleet growth to tap new markets that were previously the exclusive domain of legacy carriers. Both will target high-end business and leisure passengers, capturing these passengers from legacy Business and First Class cabins.

What about carriers that share both legacy and innovator characteristics? Several Asian carriers, including Singapore Airlines and Cathay Pacific, have evolved through the decades with a high-value, business-focused product. Like service innovators, they operate primarily on long-haul routes with a limited number of aircraft types. Compared to British, American and United, these airlines are service innovators; while they dominate their hubs with a range of services, they focus on growth and capturing high-yield business traffic.

Legacy Market Vise

Growth by service innovators, combined with continued expansion by low-cost carriers, will create a crisis for legacy airlines. This crisis will emerge whether or not legacy carriers fix their cost structures. Why can't legacies avoid this competitive reality?

Impact of Service Innovator Growth

First, service innovators will continue to capture high-margin traffic. Legacies have been largely protected from high-yield competition to date; not because of superior product, but rather because service innovators' fleets have been too small to generate

real network scale. Service innovators will force legacies to invest in high-cost premium products if the legacies want to remain competitive in high-yield markets. Legacies will be forced to increase pitch, add new airport and on-board amenities, and reverse recent cuts in their loyalty programs to chase the limited high-yield global segment. These high-yield passengers today help legacies compete with regional low-cost carriers. Tomorrow, legacies will have to compete with Emirates, Virgin Atlantic and other innovators just to keep market share in this critical segment.[8]

Legacy Cost Structures

Second, no matter how much legacies cut their costs, they will always be higher-cost providers than new low-cost carriers. Competing with service innovators at the same time only compounds and exacerbates this cost disadvantage.

Operating multiple fleet types, cabin products and regional and intercontinental hybrid networks adds costs that focused low-cost carriers avoid. Just as importantly, legacy carriers have seniority-based workforces. Unless legacies truly start from scratch, which is almost impossible given labor rules in the United States and Europe, fire employees and rehire in a non-seniority structure, their labor costs will always be higher than that of a new entrant. Bankruptcy and out-of-court restructuring offers legacies a path to reducing costs, but the effectiveness and durability of those cuts through time is questionable.

How will legacies be impacted by the inevitable expansion of low-cost carriers to intercontinental routes? Intercontinental low-cost carriers will offer price-sensitive passengers an alternative to the exorbitant fares and arcane rules offered by the legacy airlines. But global low-cost carriers will put pressure on these key international routes at a time when legacies must also combat new service innovator growth and resulting competition for premium traffic.

Shifting Battlegrounds

To understand why these twin pressures represent a worst-case scenario for legacy carriers, one must understand how they have thus far approached competition with regional low-cost competitors.

Legacy airlines have been fighting a one-front war. Low-cost carriers entered key regional business and leisure markets. Over the past four years jetBlue has built a formidable route network from New York JFK to San Francisco, Los Angeles, Seattle, Denver, Miami and other major metropolitan areas. American and Delta, which both have substantial domestic and international operations from JFK, have seen yields decline on competitive routes as jetBlue has grown through low prices and product innovation. A recent Transportation Research Board study concluded that when

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[8] Lufthansa's new all-business routes, operated by PrivatAir, provide some perspective about how legacy carriers will respond. Lufthansa's all-business service is outsourced to a dedicated operator, providing extra business capacity in a distinct product.

Southwest Airlines entered legacy routes between 1990 and 1998, fares dropped by an average of 54 percent.[9] The jetBlue effect has been at least equivalent to Southwest's impact on local market fares.

However, low-fare competition has been regional, not intercontinental. Because jetBlue does not fly to Europe, American's yields from New York to Europe in Economy Class remain about twice what they are on flights from New York to California. These highly profitable international fares allow American to discount seats on regional routes from New York where they compete with jetBlue. The combination of high business and economy class yields allows price competition through cross-subsidization.

Having international flights feed domestic flights in competitive markets also bolsters legacy airlines. Because 20 percent of American Airlines' arriving passengers at JFK connect to international flights, American can aggressively discount 80 percent of its seats on domestic flights to compete with jetBlue while maintaining 20 percent at higher international yields. For example, American serves Brussels nonstop from New York JFK. Some passengers flying from Los Angeles to New York on American connect to the Brussels flight. American is able to take profits earned from the aggregate fare and allocate a portion to the LAX-JFK segment. This profit allocation allows American to discount the local-market seats – those sold to passengers traveling LAX-JFK only – to match jetBlue's fares from Long Beach to JFK.

CHANGING FRONTS OF COMPETITION

Legacy airlines have fought a one-front war with regional low-cost carriers. New long-haul LCCs like maxJet fundamentally change the industry landscape by reducing legacies' global network advantages.

Equally important is American's partnership with British Airways, Japan Air Lines, Aer Lingus and Iberia, which allows American to fill its domestic flights to the airport with high-fare connecting traffic. This is another reason why the international mega-alliance will prove critical to long-term legacy sustainability. International alliances fortify domestic networks by attracting passengers to local-market flights who will connect internationally and pay higher international rates.

If low-cost carriers remain specialized in domestic, quick-turn, high-utilization flying, their ability to penetrate this international pool of high-margin traffic will be limited. Low cost carriers cannot move a passenger from Los Angeles to Brussels. As long as high-yield international traffic is the exclusive domain of legacy airlines, and as long as legacy alliances allow legacies to fill excess capacity on domestic flights with passengers traveling to far-away places, legacies will be able to offer matching fares and frequencies on domestic flights to compete with low-cost carriers.

Just as international feed protects legacy airlines from domestic low-cost competition, domestic feed similarly protects legacies from international growth by service innovators. Service innovators serve JFK, but they connect the airport to London, Dubai and other global business destinations. By providing the only business-class

[9] TRB "Entry and Competition in the US Airline Industry: Issues and Opportunities." NRC, Special Report 255, Washington, DC.

transit option from Buffalo to Lagos, for example, legacy airlines can insulate core pieces of their market base from service innovators.

MARKET VISE

Legacies must lower regional fares to retain market share while adding services on international flights. They must cut costs while adding amenities. Legacies must build seamless network connections and seek protection from route authorities and slot-controlled airports.

As service innovators grow, they will build their global hubs to the level where nonstop spokes to secondary cities becomes possible. Emirates may consider nonstop flights from Dubai to Washington, Atlanta and Boston in the future. But Emirates will never serve Buffalo, Burlington or Charleston nonstop from Dubai. Global passengers originating in these cities will be the domain of legacy airlines and their alliances, or of low-cost carriers when partnerships emerge.

The Intercontinental LCC

Such a competitive environment leaves the door wide open for a new generation of intercontinental low-fare, low-cost competitors. Legacy airlines have boosted international fares to support system wide profitability. While in regional markets legacies have adopted low-cost carrier fare structures, reducing last-minute fares and Saturday-night stay restrictions, international fare rules are still designed to maximize revenues from business travelers. Unless international passengers stay over Saturday nights, book far in advance and keep to their original flights, they are gouged with fares of $1,500 or more round-trip, even in economy class.

Not every international market can sustain the high fares legacy airlines need to maintain. In the largest business markets, sufficient international traffic has supported fare levels, making continued domestic operations possible. American and Delta have continued their New York/JFK operations because of their strong international routes and because their corporate contracts protect their core base from jetBlue. But in smaller legacy hubs under attack from low-cost carriers, the level of corporate traffic and elasticity of traffic make high fares impractical. Legacies are therefore focusing their expanded international capacity on key hub markets.

ELASTICITY

Many key travel markets are **elastic:** that is, a drop in fares triggers a disproportionate increase in market traffic.

These key corporate markets also represent the most attractive target for new intercontinental low-cost, low-fare carriers. The high fares charged in key business markets that underwrite domestic competition are the bloated underbellies of profit for new low-cost carriers to attack. maxJet will be the first global low-cost, low-fare carrier, serving the New York to London market; instead of flying to Heathrow (a slot- and bilateral-restricted market) maxJet will serve London/Stansted. Business adoption of Stansted as an alternative to Heathrow and Gatwick will be a critical success factor. While LCCs have demonstrated the viability of Stansted for regional flights, it is untested recently for intercontinental flights.

maxJet's operating model will be based on regional low-cost carriers' but will be customized for the unique customer demand of international routes. maxJet will offer two types of seating on board: business-class seats with 43" pitch, sold as Premium Economy, and economy-class seats with 34" pitch, sold as Standard Economy. maxJet will offer one level of business-caliber amenities to all passengers, with a heavy emphasis on buy-on-board. By standardizing product and employing a low cost base,

maxJet will offer Standard Economy fares from $100 to $300 and Premium Economy fares from $400 to $800 each way. maxJet's *Premium Economy* fares will be sold below 60 percent of current *Economy Class* seats in the market.[10]

Even though maxJet will serve Stansted, its entry may trigger a competitive response simply because maxJet represents the first real threat to global dominance by legacy carriers. Offering Standard and Premium seats at discounted, flexible fares will likely capture legacy passengers and stimulate new traffic. Whether legacy carriers are willing to cut fares across the board to compete and participate in market growth, thus collapsing their financial house of cards, remains to be seen.

Legacy carriers will be forced to choose: compete with new international low-cost carriers by adding seats, stripping amenities and cutting fares, or compete with service innovators by adding frills and ceding the low-end business and leisure market to low-cost competition.

Legacy carriers will have to make the choice. The obvious point-to-point routes for a new transatlantic carrier will involve airports well-served by other regional low-cost carriers. London/Stansted, London/Luton, New York/JFK, Boston/Logan, Paris/Orly, Geneva and Berlin/Schönefeld are all destinations for a new transatlantic entrant, and all are well-served by regional LCCs. By connecting these cities, a new global low-fare bridge will connect regional networks, permitting composite low-fare itineraries that rival legacy networks. Familiar brand names of regional low-cost carriers will become recognized global alternatives to legacy brands.

Even if low-cost carriers worldwide do not enter into marketing partnerships, compelling evidence already suggests that informed passengers will build their own itineraries to bypass legacy networks, especially on last-minute itineraries where legacy fares are the highest. Because booking these ad-hoc composite itineraries requires awareness of local carriers, tolerance of a complex booking process and willingness to risk one's own connections, most ad-hoc composite itinerary passengers will be repeat business flyers who are familiar with routings, competitors and contingencies.

AD-HOC TRANSFERS

In 2004, over 15 percent of passengers at Stansted will transit from one low-cost carrier to another on separate itineraries. Passengers are already connecting among low-cost carrier networks.

All indications at Stansted suggest that ad-hoc composite itinerary bookings are prevalent. At Stansted alone, over three million passengers are expected to transit the airport on independent bookings in 2004, arriving on one LCC and connecting to another, but without any of the traditional "interline" infrastructure that legacy carriers provide.[11] These passengers use focused low-cost carrier networks and build their own connecting itineraries through separate bookings on each carrier's Web site.

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[10] DOT T-100 Data, YE Q1 2004, maxJet

[11] BAA Stansted, July 2004

Implications

The implications of this kind of consumer behavior for international low-cost connections will be profound for the legacy carriers, especially when combined with the mounting threat from service innovators. Offering last-minute fares that are a fraction of the last-minute fares offered by legacies will drive passengers to trade the inconvenience of a composite itinerary – with baggage reclaim and recheck, long connecting times and potentially terminal changes – for substantial savings.

While the impact on leisure passengers should be significant, it is the potential shift of business traffic to global composite low-fare itineraries that would have the most impact on legacy airlines. Business passengers can be divided into three categories:

- **Price driven,** where the lowest fare wins. jetBlue, Southwest, easyJet and Ryanair have demonstrated that a significant portion of corporate travelers, especially last-minute, cares primarily about low fares.

- **Contract driven,** where the convenience of a broad network and consolidated corporate purchasing contract are the primary factors. Legacy airlines have owned this segment to date because low-cost carriers have not offered the network scope to make a blanket corporate deal worthwhile. In addition, corporations want a travel solution that provides both global and regional travel options. The emergence of low-cost carrier marketing agreements would provide the first low-fare solution for this sector.

- **Product driven,** where seat comfort and status are the most important factors. These status travelers are price-insensitive and are the typical first-class passengers on legacy airlines. They also represent the target market for premium services on service innovators.

Legacies will face intense pressure in each of these three categories. First, price-driven international passengers will likely be the core customer base for low-cost intercontinental low-cost alliances. The pace at which low-cost carriers enter into marketing alliances to broaden their networks will determine the pace at which legacy airlines lose this clientele. Second, contract-driven passengers may shift to low-cost providers in coming years if low-cost competitors can link their networks. The emergence of global low-fare travel options will make low-cost contracts a viable alternative to legacy agreements. Third, service innovators will continue to attack the high-end segment with status-driven product.

Section

3

Why Now?

Changing competitive landscapes will force legacies to compete with both service innovators and low-cost carriers. Low-cost carriers will seek a new format for cross-sales without adding the inherent cost structure of traditional interlining.

To compete with low-cost carriers and service innovators, today's national carriers will inevitably take on many operating characteristics associated with low-cost carriers. Rolling hub structures, revised labor agreements and simplified fleet structures have helped established legacy airlines to reduce costs over the past four years. However, the hub and spoke structure is not fundamentally flawed, especially for connecting small markets to the rest of the world.

While tomorrow's world will have fewer legacy airlines, there will always be national flag carriers that operate fortress hubs where domestic networks interface with international flights. As legacy carriers defend their hubs, they will likely build the following characteristics:

- **Type simplification,** with two or three different aircraft families. With advances in reservations technology, airlines will adopt several different seat configurations within each aircraft family, optimizing available product for the specific demands of each route. This flexibility may help legacies retain high-yield traffic from service innovators and offer high-density seating on the same aircraft to compete with low-cost entrants.

- **Further liberalization** of work rules in union agreements. Productivity will require continued revisions. Labor costs must be brought down to compete with service innovators and low-cost entrants, but they will never equalize because of seniority systems.

- **New focus** on corporate contracts. Legacy carriers will fight to the death for corporate contracts since those passengers place the highest value on network

scope and nonstop flights. Legacy carriers will also focus on customers in their hub cities.

The pace of change for legacy carriers will be set by four factors. Protected markets (whether from airport slots, exclusive terminal leases or restricted bilateral route authorities) are actually harmful to legacy carriers. They provide an artificial cost cushion and delay changes to legacy cost structures. Second, direct government intervention in airline finances stymies change by blinding labor to the airline's financial reality. Third, the severity of fuel prices will impact how quickly other cost components are addressed. Fourth, the strength of global alliances like Star Alliance and Oneworld bolsters legacy financials by offering corporate travelers broad networks. Not until low-cost carriers and service innovators enter into global alliances will corporate passengers pressure legacies to change their fare and cost structures.

Tomorrow's Partnerships

Today there is clear delineation between the broad, international networks of legacy alliances and the focused, point-to-point networks of low-cost carriers and specialized service innovators. Legacy airlines' networks can be subdivided into three parts: regional feeder routes, domestic extended legs and international flights. Regional feeder routes support hub structures where passengers can connect to longer-haul domestic legs and international flights. Because legacies focus connecting passengers through the hub onto regional flights, legacies can support frequencies to very small markets that would otherwise have little chance to support frequent flights to major cities.

Low-cost carriers, in contrast, have two dominant operating strategies. Even the most committed point-to-point LCCs operate focus cities in strong business markets, and most are the dominant carriers in those focus cities. Some low-cost carriers are committed hub and spoke carriers, using their focus cities as connecting points within their networks. They allow passengers to check bags from spoke to spoke and encourage connections. AirTran, Independence and even jetBlue are hub and spoke airlines; Southwest Airlines does not brand itself as a hub carrier but has ten primary focus cities where passengers can connect from flight to flight. Other low-cost carriers are religiously point-to-point, not even allowing connections across their own flights. Passengers flying on easyJet, Ryanair and other European point-to-point airlines must reclaim their bags and check in again if they want to connect from flight to flight.

Whether passengers must put up with the inconvenience of collecting bags at intermediate points, the availability of connecting flights broadens each airline's network scope and increases the size of its markets. As each low-fare airline grows, its network overlap will result in an exponential increase in possible connecting itineraries. But only with alliances will today's low-cost carriers be able to capture these connecting passengers and profitably attack legacy carriers across their global networks.

Forms of Low-Cost Carrier Connectivity

The real question is not whether low-cost carriers and specialists will develop connectivity both inside their own networks and with new partners, but rather what form such connectivity will take.

As Stansted's traffic numbers demonstrate, passengers are developing the links whether the carriers endorse them or not, and airlines are far better off guiding passengers into composite itineraries than to risk losing those passengers to legacy competitors. Passengers have demonstrated the opportunity, and low-cost carriers would be foolish to delay taking the initiative given the strategic advantages connectivity provides.

Indeed, some smaller low-cost carriers have begun to position themselves as a bridge to other low-cost carriers' broad networks. Iceland Express' Web site openly advocates using Ryanair and easyJet to connect onward from Stansted into continental Europe. Alternatively, other low-cost carriers have actually entered into formal partnerships. Air Berlin advertises flights for Hapag-Lloyd and LTU, both German charter specialists.

EARLY INNOVATORS

European low-cost carriers have started to cross-market their networks. Iceland Express, Air Berlin and Norwegian have entered into interactive marketing agreements to build network scope.

While bridges and partnerships will emerge among low-cost carriers, the change will be more philosophical than based in infrastructure change. Low-cost carrier management teams keep strong focus on the fundamentals: simplify operations, minimize turn times and avoid unnecessary costs. Entering into traditional code-share or interline agreements introduces new costs. More importantly, the industry standard partnership paradigm reduces flexibility. The early attempts by low-cost carriers to cooperate will not mature until two factors have occurred:

- Intercontinental low-cost carriers allow regional carriers to link to global networks, and
- Partner carriers develop a new interline format based not on risky infrastructure investments, but rather on interactive marketing and joint sales.

Why would low-cost management teams even consider a change in strategy?

Defense Against Legacies

Partnerships across low-cost carriers fortify each independent carrier by expanding the size of the market. Linking low-cost networks in low-fare sales alliances significantly weakens legacies' ability to use high-yield network traffic to subsidize local-market competition.

Future Growth

Without partnerships, low-cost carriers will face a limit on their operating strategies. Regional markets can only support a finite number of low-cost carriers before saturation is reached. For LCCs to continue growing, passengers from outside each airline's core market must be attracted. Growth is the key. Low cost airlines have

committed to unprecedented growth, and that capacity must be filled. With legacy airlines also launching competitive attacks, the need to diversify that capacity with global composite itineraries is also critical.

Marketing and Branding

Global partnerships are an effective way for today's low-cost carriers to advertise their networks, products and fares worldwide. Each additional global partner helps carry an airline's brand into new markets. Not only does this benefit passengers who buy global travel through a sales alliance; it also builds awareness in traditional legacy markets of alternate, value-priced travel options on low-cost carriers.

Affinity Programs and Frequent-Flyer Programs

To boost profit margins and attract new customers, most low-cost carriers are extending their brand names through partnerships with other service providers, including hotels, rental cars and credit cards. These affinity arrangements can also benefit from partnership agreements based on cross-marketing and joint sales. By extending the reach of specific affinity programs through inter-airline sales partnerships, airlines can increase commissions and make additional affinity programs cost-effective for merchants.

Similarly, for those low-cost carriers that operate frequent flyer or elite recognition programs, barter agreements with partner carriers can open new program destinations that are attractive to flyers. Star Alliance, Oneworld and SkyTeam offer member frequent flyers an enormous range of potential award destinations, and business travelers often steer their purchasing decision among airlines to maximize their mileage for vacations or family trips. By joining forces, low-cost carriers can provide the benefits of award travel across a wide network at little additional cost.

Given these sales, marketing and affinity advantages, new forms of partnership must emerge. The new model must provide the advantages of cost-effective operational focus with the advantages of network scope. This new partnership paradigm must start from independent, point-to-point networks that overlap at key focus cities, where the incremental cost of connecting a passenger from one network to another is minimized. This model must offer consumers composite itineraries where similar products are offered on each partner. Finally, this model must be grounded in technology and distribution networks that allow airlines to link inventories without disrupting their existing operating models and systems.

A New Format

Today's International Airline Transport Association (IATA) based interline structure is inappropriate for these next-generation alliances. Legacies define their interline relationships through procedures defined jointly in meetings conducted by IATA. The jointly defined Interline Traffic Agreement prescribes responsibilities, both operational and financial, that are required to merge networks and interline passengers. These

responsibilities, designed to provide a seamless transit experience for passengers, also come with significant operating costs.

For example:

- IATA tickets for travel on partner airlines must meet stringent guidelines for transferability, validation and financial payment. Because of complicated reporting requirements under the IATA agreement for shared itineraries, electronic tickets are often impractical, and every ticket must be based on minimum fares and service charges.

  In today's world of electronic tickets, Web-based customer service and price-sensitivity, the IATA restrictions now place a significant collar on cutting connecting fares and giving passengers control over their own itineraries. That reduction in flexibility is a critical disadvantage for low-cost carriers.

- Baggage coordination is highly complex. Partner airlines must coordinate their handling agents to follow specific transfer methods defined in the IATA agreement, which adds significant cost to transfers.

  Airlines are bound to specific baggage tags, weight and size restrictions, and procedures for lost baggage. Baggage coordination does not need to be as complicated as the IATA model. Passengers clearing customs at a point of entry must pick their bags up regardless of the IATA baggage tag, making these baggage costs archaic and superfluous.

- Settlement procedures for joint tickets require significant overhead and paper processing. More importantly, the complex IATA ticket settlement procedures delay when airlines can actually receive payment for passenger itineraries booked by another carrier.

The IATA framework is heavy, inflexible and expensive. Low-cost carriers have built their sustainable cost advantage by eschewing infrastructure and tailoring their product to the self-service customer. Subscribing to the IATA framework requires low-cost airlines to build personnel, baggage transfer and security infrastructure that are not needed for core domestic or regional operations.

Even if low-cost passengers were willing to pay a service fee to address incremental costs of baggage transfer and security screening, the organizational cost for low-cost carriers would be significant. Introducing connectivity into low-cost networks must not come at the price of efficiency.

Form of New Alliances

IATA agreements are inappropriate for next-generation partnerships among low-cost, low-fare competitors. Developing a new partnership methodology requires three

enabling events, all of which are emerging in the near future. Overlap in networks, new transatlantic connections and Web-based technology integration must be present to reduce implementation costs and generate sufficient returns to make such partnerships worthwhile.

Overlap in Low-Cost Networks

During 2005, the continued growth of existing low-cost networks, as well as the entry of intercontinental low-cost airlines, will result in focus city overlap. Overlap will occur between regional low-cost networks (some LCCs connect Stansted to Eastern Europe; others to Ireland and Scotland; and yet others to Scandinavia, France, Germany, Italy and Spain) and in longer-haul markets. Focus city overlap makes a composite itinerary possible. Even without formal partnerships, passengers can book tickets on two different low-cost carriers, connect at the overlapping city and transit to their final destination.

Transatlantic and Long-Haul LCCs

The entry in 2005 of new transatlantic low-cost carriers will connect major cities in Europe with their counterparts in the United States. New York/JFK and London/Stansted will be the first cities connected by a low-fare transatlantic bridge.

Web-Based Technology Integration

The final enabling development is the debut of mission-critical Web-based integration tools that can link together low-cost carriers' Internet-based sales and distribution systems, coordinating inventory without interfacing the industry's central distribution hubs. Legacy airlines have complicated inventory links between their reservations systems and industry GDSs and travel agencies. Low-cost carriers have mainly avoided these high-cost distribution systems to date, preferring to use reservations products optimized for selling tickets directly to consumers without using a middleman.

The advent of XML-based communication architecture between diverse reservations systems will allow airlines to cross-sell inventory on connecting itineraries. Through their Web sites, airlines can advertise destinations outside of that carrier's own network. While Web-based technologies can also coordinate the operations of baggage transfer, delay management and security clearances, in the short-term the primary advantage of Web based technologies will be its formative role in enabling interactive marketing and sales agreements.

Limitations of Ad-Hoc Connections

One certainty is that passengers have already started to use the Internet to identify and book creative itineraries that span two or more low-cost airlines. These unpublished connections can only be identified by knowing the networks of individual low-cost carriers, by booking two separate itineraries, and by claiming bags at the interchange point and checking in again with the second carrier. Unpublished connections are not infrequent where LCC focus cities overlap, but since unpublished connections are not

tallied or released by regulatory bodies, estimating the volume of unpublished connections can be difficult.

In fact, Stansted's operator, BAA plc, has launched a new marketing campaign and Web site that helps passengers identify connecting itineraries to and from the 100 cities served from the airport.

BAA's Web site helps passengers time their arrivals and departures to allow for customs clearance, bag reclaim, recheck and departure. Arriving EU passengers must still clear customs and immigration before returning to the terminal headhouse to check in again. Transiting passengers must wait in check-in lines, drop their bags and then clear security. Once through security, they wait in a large shopping hall until the departure of their next flight. While this arrangement benefits BAA by maximizing the flow of passengers through their retail hall, it also benefits low-cost carriers by shifting the responsibility of the connection to the passengers.

The ad-hoc partnership strategy forces the customer to:

- Pick up his or her own bags at the baggage hall, simplifying ground handling by routing all bags to a central point.
- Check in for his or her next flight through existing check-in facilities, avoiding a specially-staffed transit desk behind security.
- Clear security through the existing checkpoint, avoiding special transit security screening required by the EU for connecting passengers.
- Take responsibility for missed connections. If a passenger's inbound connection is delayed, it is up to that passenger to find accommodations, either locally or on a different flight to his or her destination.

Legacy Competition: The Key Driver

Given the low-cost, low-impact strategy of ad hoc connections, why would low-cost carriers want to consider anything different? The pace at which passengers inside Europe have discovered this composite itinerary strategy suggests that for short-haul regional connections, passengers are willing to accept double check-in and baggage check in exchange for rock-bottom fares.

One answer discussed above is network growth. Intercontinental connecting networks offer new pools of passengers with which rapidly expanding low-cost carriers can fill their planes. But the answer also lies in network scope: connecting passengers insulate a low-cost carrier from competitive onslaught by legacy competitors.

Low-cost carriers invest millions in marketing to build their brands and draw passengers to their Web sites. Those passengers expect to find service in the markets

they want to fly. Passengers who live in LCC focus cities find plentiful service on those sites. Indeed, residents of London, Paris and Geneva are in the crosshairs of today's European low-cost carriers, just as passengers in New York or Atlanta are in jetBlue's and AirTran's crosshairs. Because each of these cities is also a hub for a major legacy carrier, LCCs face intense fare-based competition from legacy carriers. LCC partnerships can frustrate fare-based legacy competition on competitive segments.

Understanding the reason why requires thinking about how legacies allocate profitability for local-market passengers (those traveling from London to Geneva, for example) versus system-wide passengers (those traveling from New York to Geneva via London). British Airways competes with easyJet for passengers from London to Geneva, but British Airways has no low-cost competition from New York to Geneva.

EasyJet serves Geneva from Luton, a secondary airport about 20 miles north of Heathrow, where British Airways has its hub. On a morning flight, easyJet offers a three-day advance round-trip fare of £121. As expected, British Airways aggressively matches easyJet's fares. British Airways offers a flight departing at 7:25 a.m. from Heathrow to Geneva, and a three-day advance round-trip ticket costs £127 (with taxes at Heathrow driving the difference).

Given that British Airways' unit costs are almost double easyJet's, how can British Airways offer these fares on an ongoing basis?

The obvious reason is that British Airways can connect passengers starting their trips in New York, Washington, Los Angeles, Tokyo and other worldwide destinations to their flight from Heathrow to Geneva. Since British Airways' objective is system wide profitability – not just profitability on the specific flight from LHR to GVA – it can boost prices in markets where there is little competition and cut fares to capture market share where they compete with easyJet. Consider British Airways' fares from New York, Washington, and Los Angeles to Geneva:

ONE-WAY FARES TO GENEVA ON BRITISH AIRWAYS[12]

Total Fare	First	Business	Economy
New York	$5,641	$3,662	$1,537
Washington	$5,388	$3,765	$1,406
Los Angeles	$6,886	$4,845	$1,739

Now consider how British Airways might pro-rate this fare to allocate revenue between the US-LHR and LHR-GVA segments. JFK-LHR is 3,451 miles; IAD-LHR 3,677 miles; LAX-LHR 5,456 miles; and LHR-GVA 470 miles.

[12] Fares from www.britishairways.com for travel departing November 25 and returning November 29.

Allocating the fares above by mileage drives the following revenue allocation:

FARE PRO-RATE BASED ON MILEAGE FLOWN[13]

Fare Allocation	First	Business	Economy
New York	$4,965 JFK-LHR $676 LHR-GVA	$3,223 JFK-LHR $439 LHR-GVA	$1,352 JFK-LHR $184 LHR-GVA
Washington	$4,777 IAD-LHR $610 LHR-GVA	$3,338 IAD-LHR $427 LHR-GVA	$1,246 IAD-LHR $159 LHR-GVA
Los Angeles	$6,339 LAX-LHR $546 LHR-GVA	$4,460 LAX-LHR $384 LHR-GVA	$1,601 LAX-LHR $138 LHR-GVA

LEGACY NETWORK ADVANTAGE

Connecting traffic, especially high-yield First and Business Class passengers, allows legacy carriers to match LCC fares while maintaining profitability.

Typically, British Airways could expect to sell 20 percent or more of their seats from London to Geneva to connecting passengers. Suppose that 80 percent of these connecting passengers are economy-class and 20 percent are premium-class, and that an even share come from New York, Washington and Los Angeles. Also, suppose British Airways allocates revenue from connecting itineraries on a mileage basis. On a 150-seat Airbus, British Airways would therefore generate a revenue pro-rate of $6,934 from connecting passengers alone.

Since British Airways' approximate operating cost is about $0.13 per seat mile, its cost for the 470-mile flight from Heathrow to Geneva is about $9,165. With $6,934 of connecting revenue in hand, British Airways only needs $2,230 of local-market revenue from the remaining 120 seats to break even on the flight. That reflects an average of just $19 per available seat.

How does this compare to easyJet? Their operating cost is about $0.055 per seat mile, or $4,200 for the trip. With 150 seat Airbus A319s, easyJet must generate an average of $28 per seat for the same sector. Connecting traffic allows British Airways to undercut easyJet by as much as a third.

What is the key factor here? There is no low-cost or service innovator competition from New York, Washington and Los Angeles to Geneva, so British Airways is forced to compete only with Air France, Swiss and other legacies that serve that market. With no fare pressure and substantial high-yield traffic, consumers are penalized with high fares and tight restrictions. The legacies have little reason to cut fares: each is fighting a battle in domestic markets with other low-cost carriers and can use the high international fares to subsidize competition. Because the legacies optimize their profitability across their entire networks, British Airways' high fares across the Atlantic allow it to respond disproportionately on regional routes.

Low-cost carrier partnerships create viable connecting options from New York, Los Angeles and Washington to Geneva. maxJet will offer transatlantic low-fare service

[13] Most airlines will use either a mileage or fare pro-rate based on stage length or services provided. Allocating by mileage flown is a good approximation under either methodology.

from New York to London, where passengers could connect to Geneva on easyJet. Without a partnership, maxJet would establish low fares on JFK-STN, and easyJet would compete on STN-GVA. But with a partnership, both maxJet and easyJet could offer low-cost, last-minute travel options on JFK-GVA.

By linking networks, low-cost carriers force legacies to respond across their entire networks, not just on specific sectors. International fare pressures eliminate legacy airlines' padding that subsidizes regional flights. The faster low-cost carriers cooperate to market the availability of low-cost composite itineraries, the faster legacies lose their market control. That clearly benefits both intercontinental and regional low-cost airlines.

These partnerships have an added benefit: they attract last-minute passengers who are the most profitable for each airline. Today's legacy fare structures penalize one-way and last-minute business passengers. Both regional and intercontinental low-fare carriers will continue to advertise fair pricing, with significantly lower last-minute fares than legacy airlines. maxJet's target $300 economy-class fare from JFK to STN, combined with the low-cost regional fare of $114 STN-GVA, creates a JFK-STN-GVA composite fare of $414. British Airways' cheapest flexible economy fare for JFK-LHR-GVA is $1,249. The regional's $114 local fare is their highest; the connection with maxJet brings a highly profitable passenger onto its network. With a breakeven fare of roughly $28, this passenger would represent up to $80 in profit. Because of the narrower margins of long-haul flying, relative profits for the transatlantic entrant would be less, but the intercontinental carrier would still consider that incremental passenger to be very profitable.

Given these factors, it is not difficult to conclude that partnerships among low-cost carriers can protect each other from legacy competition, can capture new markets of passengers with industry-leading composite fares and can generate significant profitability. Partnerships will evolve that provide the network advantages of connectivity (scope, insulation, profitability) without the cost burdens of the IATA format.

Section
4

The Five-Phase Evolution of LCC Partnerships

Low-cost carrier partnerships will emerge in five sequential stages as carriers test the costs and benefits of increasing integration.

Low-cost carriers will develop partnerships in coming years, but these partnerships will develop organically. The timing will be faster than most people think: the confluence of factors, from growth that increases overlap among networks to competitive restructuring by legacy airlines, will encourage low-cost carriers to build connectivity without sacrificing their core operating models.

Partnerships will evolve in a five-phase process, the first phases of which are already present in the market.

1. **Colocation.** LCC regional and international networks begin to overlap at key focus cities, creating the opportunity for connections to occur.

2. **Awareness.** Airports take the lead in helping passengers build connecting itineraries on airport Web sites with passive participation by LCCs. No information is exchanged between low-cost carriers and no joint marketing occurs by the airlines themselves.

3. **Referrals.** LCCs enter into basic partnership agreements. These agreements promote destinations on other carriers' networks and refer interested passengers to partner sites for booking. Passengers book two tickets on two Web sites and are fully responsible for their own connections at overlapping focus cities like Stansted. LCCs boost network scope without any change to cost or operating structures.

4. **Endorsement.** Building on the basic referral model, each LCC makes passengers aware of connecting opportunities. In this phase, bookings

now occur on a single Web site where the passenger associates the connecting flight with the originating carrier. The site connects directly to partner reservations systems using Web services technology. While the passenger is still booking two tickets with two payments and is fully responsible for the connection, the joint promotion of network destinations creates the illusion of a broad network on par with legacy carriers.

5. **Bundling.** After proving the viability of endorsement, carriers may elect to add infrastructure that facilitates connections. These new costs may be passed on as service charges or may be justified by the high-yield revenue generated from connections. Carriers might add baggage transfer, transit lounges or coordinate schedules for quick connections. This "bundling" lifts the high-value pieces of the IATA structure without much of the cost burden. Carriers might also agree to create a single passenger record structure, in which technology links would facilitate changes to itineraries without disrupting existing reservations systems.

If bundling proves a success, some low-cost carriers may identify opportunities to interline with legacy airlines and specialty carriers that subscribe only to IATA standards. If low-cost carriers see high-yield opportunities, the additional cost of the IATA format may be cost-effective. It is unlikely that today's low-cost carriers would consider an IATA model without first testing lower-cost strategies. However, legacies that successfully transition to low-cost models may have already built the high-cost IATA infrastructure and may continue to use those strategies going forward.

In each phase, low-cost carriers will evaluate three factors.

- ❖ First, they will assess the **cost that each phase introduces**, and how cost is offset by an increase in yields. The cost could include higher handling fees, technology changes or new staffing. The offset could come in tapping new markets of passengers or in compensating for legacy cross-subsidization on competitive routes.

- ❖ Second, they will assess how that **partnership bolsters their position** in the market, both insulating from legacy carriers and differentiating from other low-cost airlines. That might come through an expanded loyalty program, through increases in schedules made possible by connecting flow or through brand presence both at home and abroad.

- ❖ Third, they will assess how **incremental market traffic from such partnerships** increases their ability to add frequencies and increase local market share.

Phase One: Colocation

The quickening pace of network overlap among low-cost carriers has resulted in **colocation**, where independent low-cost carriers have opened stations in the same airports. The presence of multiple low-cost carriers at key airports creates the opportunity for passengers to stitch together their own itineraries from multiple bookings.

In October 2004, the top five co-location terminals in Europe included Stansted, Luton, Berlin Schönefeld, Amsterdam and Paris/Orly. At each of those airports, at least five low-cost carriers served multiple cities, resulting in hundreds of potential composite itineraries.

What are the advantages of colocation as a connecting strategy for airlines?

Colocation is Inexpensive and Low-Risk

There is no incremental cost for a low-cost airline in having its arriving passengers transit to another carrier's departure. Since LCCs take no responsibility for passengers if they miss their flight, the LCC has no financial exposure.

Colocation keeps focus

Colocation does not detract from organizational focus. LCCs are committed to operating a single model of high-utilization, quick-turn operations. By not building infrastructure for connectivity, low-cost carriers optimize their infrastructure for their existing operations.

PHASE ONE: COLOCATION

Independent low-cost carrier point-to-point networks will overlap in key cities, making composite itineraries possible.

Colocation expands the market

Even if a low-cost carrier does nothing to advertise the availability of connections to its passengers or the public, opt-in automated Web-search engines like Kayak, TravelZoo and SideStep will be able to identify the availability of such routings.

LCCs who settle for colocation miss an opportunity to generate market growth, increase profitability, insulate networks and reinforce goodwill. Colocation has the potential to cause customer confusion since passengers booking themselves on two separate Web sites do not think about what happens if they miss the connection. Passengers booking independent itineraries can miscalculate connecting time or not realize that baggage claim and recheck is required. If these passengers have a bad connecting experience, they will blame either or both of the carriers without realizing their error.

While the risks of colocation are limited, the upside from introducing sales coordination and marketing agreements are substantial. Colocation leaves the discovery of connections up to the passenger. But most passengers will need to learn about connecting opportunities to consider a composite itinerary.

Phase Two: Airport Awareness

Airports have already identified the potential opportunities of (and problems with) colocation and have developed Awareness campaigns to address the two critical problems of connection time and transfer infrastructure. By taking the lead, airports can influence how passengers make their connections, while low-cost carriers avoid having to make investments accordingly.

Airport campaigns that boost awareness of connections include:

BAA plc's Connecting at Stansted
Emphasizing proper planning for passengers, the BAA campaign boosts awareness of overlapping networks and plans out optimal itineraries for passengers.

Berlin Airports' SXF Connect
Similar to BAA Stansted, Berlin Airports' Brandenburg site helps passengers build complex itineraries that use Berlin's airports as the interchange point among carriers.

PHASE TWO: AWARENESS

Airports will take the lead in guiding passengers to low-cost carrier composite itineraries. Success will be limited.

Awareness programs do boost the passenger adoption of composite itineraries as an alternative to routings on legacy carriers. However, airports have limited reach into the traveling public, and therefore airports are not the optimal intermediary if increasing the size of the market and insulating from legacy competition is the objective. When passengers travel, they research airline Web sites, not airport sites. Cross-marketing agreements must be generated by airlines to yield competitive advantages.

Phase Three: Referrals

Since airports are already taking on the responsibility for publicizing potential connections, low-cost carriers will soon start making these referrals themselves to differentiate their markets and capture traffic. At larger cities in Europe, not only do multiple low-cost carriers serve those key airports, but many actually overlap on specific routes.

From London to Berlin, for example, three low-cost carriers serve the market: Air Berlin from Stansted to Tegel, Ryanair from Stansted to Shönefeld, and easyJet from Luton to Schönefeld, in addition to nonstop legacy flights on British Airways and Lufthansa. To win market share on the Berlin-Glasgow, Berlin-Dublin and Berlin-Shannon segments, for example, each carrier needs to make the availability of its connection opportunity clear on its Web site.

The referral model involves one low-cost carrier advertising the presence of another to capture connecting passengers.

Web Based Referrals

Referrals are electronic. Banner advertisements, text flags or e-mails are cost-effective ways to let potential passengers know that a connecting itinerary is available. If a passenger chooses to book a composite itinerary through a referral, he or she books the first flight on one Web site and then is transferred to the partner site for the connecting flight. This linkage could be seamless and transparent (i.e. retaining the referring airline's brand) or it could be a true hand-off to the partner site.

No Reservations Integration

Referrals entail basic advertisements without core integration of reservations systems, booking engines or passenger management systems. Passengers are truly making two separate bookings on two Web sites with two payments, two confirmation numbers and two credit card bills.

PHASE THREE: REFERRALS

Low-cost carriers will link their Web sites with simple cross sales agreements, expanding reach without incurring connecting passenger costs.

No Coordination

Low-cost carriers can still avoid putting in place any connecting infrastructure, but because they generate the connection they can explicitly tell consumers what to expect. Airlines can make clear to connecting passengers that in exchange for a low fare, passengers will be expected to collect their bags, clear customs, and check in again on a connecting partner.

The referral phase does not require any real technology enhancements or alterations. Airlines are simply listing partner destinations in their schedules but at the time of purchase pass off customers to their partners.

Phase Four: Endorsement

As airlines begin to refer passengers to one another to encourage composite itineraries, they will want to find ways to control the customer purchasing experience. First, anytime an airline passes a customer to a partner site, it could potentially lose that passenger. Web connections could time out, the passenger could lose patience with having to book twice, or the passenger might see an alternate routing on the partner site that does not involve the originating carrier. Second, consolidating the billing infrastructure simplifies the cost structures for participating airlines.

In the Endorsement phase, airlines will link their inventory systems and billing systems so that each partner's Web site is capable of making a booking directly into the partner system. Passengers will still receive two bookings with two credit card charges. However, they will be able to book a composite itinerary through a single Web site.

This does represent an explicit endorsement of a partner's service by the originating carrier. The passenger only sees the originator's brand name during the booking process, although the passenger will be advised that a connecting flight is operated by another airline. This is beneficial for the originating airline: it gets credit in the public for having a broad network, and passengers will visit that carrier's site first when researching travel to other cities.

It is reasonable to expect that endorsing airlines will enter into block-space agreements once passenger flows are relatively defined. If one airline is consistently transferring 10 passengers daily onto a flight operated by a partner, that airline would likely want to purchase five partner seats daily that it could resell at a profit. Once flows are demonstrated and relative risk defined, block space agreements offer stability and profit upside for partners.

Implications of Endorsement

Endorsement opens up two important new opportunities. First, endorsement directly draws new traffic into local markets, allowing regional carriers to **add new frequencies**. Increasing frequencies can have a disproportionate impact on overall market share and increases the value of the regional low-cost service to profitable last-minute business passengers. Low-cost carriers that accommodate incremental network traffic through new frequencies will also significantly boost their position in focus cities.

PHASE FOUR: ENDORSEMENT

By linking Web-based reservations systems, LCCs will reap the benefits of network alliances without significant per-passenger costs. They can boost frequencies and accelerate their network growth.

Second, endorsement makes possible the **double-connect** composite itinerary. The Referral model is limited by the complexity of connections; a single-connection is manageable, but without basic reservations data integration to check routings and seat availability, double-connections are exceedingly complicated. When low-cost carrier alliances involve three or more airlines (i.e., a regional carrier in the United States, an intercontinental connector and a regional carrier in Europe) the need to present complex itineraries as a package becomes apparent.

To understand why this exchange of data is critical, consider how a US-based low-cost carrier like AirTran would present maxJet's European destinations to its customer base. Under a simple **referral** model, AirTran would have a banner advertisement on its home page that referred passengers to maxJet's Web site. The AirTran site would take bookings from origin to the gateway (overlap) city, and then passengers would be passed to maxJet's site to book the maxJet flight.

Under the **endorsement** model with a two-airline partnership, AirTran's Web site would directly query the maxJet inventory system through industry-standard Web services protocol. A passenger would see the standard AirTran reservations pages, but for international trips (from Atlanta to London via New York) the maxJet flight would be listed as a standard connection. With appropriate disclaimers provided about baggage transfers and interrupted trip responsibilities, a passenger would book a composite itinerary on the AirTran site, which would in turn

communicate with the maxJet inventory and billing systems to process the ticket. The passenger would be billed by each system for respective segments, and the passenger would be sent an e-mail confirming the reservation and providing instructions for changing the ticket.

For two-airline partnerships, endorsement streamlines the customer experience and increases the number of passengers who will adopt the service. When three or more airlines enter into an endorsement partnership, linking their regional and intercontinental networks in a global alliance, the need for endorsement becomes critical.

Suppose that AirTran wanted to list cities served by easyJet as part of its route network. Because three flights would be involved, under the referral model a passenger would have to book three reservations on three different Web sites. Under the endorsement model, the AirTran Web site checks inventory availability on both maxJet and easyJet, automatically makes a booking through Web services interfaces on each partner site, and sends confirmation to the traveling passenger. The passenger does not need to keep track of each airline's arrival and departure times, fare restrictions and service options when booking each individual reservation. Under the referral model, the number of successful three-airline composite bookings would be minimal. Under endorsement, the linkages between each carrier become clear to customers, translating to new market share.

Web Services technology is the key to enabling low-cost endorsement. Without XML-based integration, partners would have to exchange and block inventory in each others' systems. With Web Services, partners' Web sites simply query other inventory systems as they do their own. All reservations, billing and verification applications stay independent but are called by a partner site.

The advantages of Endorsement include:

Interactive Marketing Without Infrastructure

By cross-selling partners' flights, low-cost carriers can broaden their networks and capture beyond passengers without investing in tight inventory links. Carriers can focus on marketing each other's services and broadening the scope of their networks.

Brand Expansion and Presence

Endorsement leverages the brand name investment made by carriers around the world. As low-cost carriers link their networks, first in specific regions and eventually around the world, individual brand names will carry across oceans. Consumers will begin to identify the dominant LCCs in each region as an alternative to national legacy airlines.

Unchanged Fare Structures

Each carrier continues to manage its own inventory and fare levels without coordination, simplifying reservations staffing and architectures. Sum-of-locals pricing will still undercut legacy fare levels in most markets, particularly for last-minute traffic.

Business Independence

Partnering among low-cost carriers requires cost-effective integration. Low-cost partnerships must be linkages among independent point-to-point networks that are viable on their own. As discussed, these linkages will emerge at overlapping focus cities, but the overlap must be seamless. An endorsement model allows each operation to remain independent while attracting new passengers who can flow from network to network.

Fortification

Endorsement creates links between carriers that boosts incremental passenger flows. As low-cost carriers expand their networks, they will target new focus cities that are likely dominated by legacy carriers. Coordinated entry into new markets by partner carriers, supported by an endorsement arrangement that builds connecting traffic, strengthens the competitive hand of entrants and weakens the ability of incumbents to compete.

Multi-Airline Partnerships

Endorsement creates a sales model that works effectively when three or more airlines enter into a cross-marketing partnership. It creates a strong vehicle for sharing flight schedules and seat availability and consolidating that data into single-screen choices for customers. Web services technology will be a key enabler of endorsement systems.

Fortification is a strong long-term benefit of the endorsement model. In both Europe and the United States, legacy carriers have retreated to their hubs. Today's fortresses are difficult to penetrate: American Airlines in Dallas, Lufthansa in Frankfurt and Air France in Paris have all built such market power on both domestic and international routes that winning significant market share by a new entrant will be difficult. Each legacy has too many opportunities to attack an entrant through cross-subsidization and route isolation. Even if new entrants attack a secondary airport, legacies can attack with discounts and new frequencies from their primary airport to retain market share.

Opening new focus cities in tandem with a coordinated package of regional and potentially intercontinental routes allows each new entrant to strengthen its competitive hand on entering fortress hubs. It makes legacy cross-subsidization more difficult. And coordination opens new focus cities that would be marginal operating alone.

Endorsement or Something More?

It is important to note that neither colocation nor awareness is a viable strategy for low-cost carriers seeking to build substantial operations in tandem at a legacy fortress hub. Airport authorities are often protective of their legacy carriers, and the relatively small potential for LCC connecting traffic over the legacy hub will make authorities reluctant to fund the marketing and technology development costs required to build awareness.

Furthermore, referral without endorsement would not be in LCC's best interests in attacking these new markets. When carriers are investing marketing dollars to build brand name, they want to maximize the impact of their own brand names. For residents of the new focus city, they want to demonstrate convenience and network scope that is competitive with the legacy incumbent. More importantly, low-cost carriers will want to guide passengers onto specific flights via the new focus city. They may choose to put high-yield connecting traffic on flights that are facing significant response and guide advance purchase customers onto less competitive flights. Controlling yields through a single booking process is an important competitive weapon, even if a passenger makes two separate reservations.

Endorsement is the key facilitator to this tandem strategy because it allows low-cost carriers to synthetically combine their networks to clone a legacy network. Without interactive marketing, a legacy must simply compete with a set of new point-to-point entrants. With endorsement and interactive marketing, a legacy airline faces a real competitive threat.

What are the key problems with endorsement? Upcoming changes to European Union rules concerning missed connections and passenger liability must be considered. The new EU regulations specify that airlines selling tickets under their brand name are responsible for accommodating passengers along the entire itinerary. In the IATA world, this responsibility is easy to understand: if Lufthansa sells a ticket to an EU national that involves a Lufthansa flight and a United Airlines connection, and if that passenger misses a connection for any reason, Lufthansa is financially responsible and must provide alternate arrangements or accommodations.

In the new world of low-cost alliances, however, this regulation is murkier. Passengers booking travel on one low-cost carrier's Web site on two or more airlines would be booking two or more separate tickets. The endorsement model is simply one of branded referral, not of ticketing integration. Low cost carriers will explicitly inform customers that composite itineraries booked through one airline's site will not convey responsibility to that airline for missed connections caused by the other.

Phase Five: Bundling

Bundling is simply Endorsement with the next level of coordination, including:

Joint Pricing

To further boost connecting traffic, partner carriers will entertain limited deviation from sum-of-locals pricing, especially for advance-purchase fares. Cooperating airlines might make special classes of inventory available to each other in limited quantities to capture last-minute passengers on composite itineraries. This cooperation is likely to focus on vacation and leisure fares booked far in advance; close-in fare advantages for sum-of-locals pricing over legacies (even after fare simplification by American, Aer Lingus and others) will not require joint pricing.

Tighter Coordination

Connecting passenger information would be exchanged between partner airlines, such that each airline could advise the passenger of potential delays. More importantly, passenger information exchange would facilitate reroutes in the event of cancellations or delays. Some Web-based integration of departure control systems would likely emerge such that passengers could receive boarding passes at their first check-in.

Schedule Coordination

Low-cost carriers may cooperate to time inbound and outbound flights to optimize connecting itineraries. This iteration of the "rolling hub" concept would involve each low-cost carrier running its own quick-turn, high-utilization model from the connecting city. However, small adjustments in the sequence of flights can open convenient new connections in high-volume, high-yield markets. Furthermore, low-cost airlines may investigate moving closer to one another at key airports.

PHASE FIVE: BUNDLING

Bundling adds the bells and whistles of traditional interline agreements without the significant per-passenger costs.

Automated Customer Service

Using Web Services technology, partner carriers will improve Web site functionality to allow passengers to modify their own travel plans, changing reservations not only in their own systems but also in those of their partners. The newer Internet-based reservations systems used by low-cost carriers provide significantly more flexibility to introduce automated customer service features than the older legacy systems. By giving passengers the ability to modify reservations across multiple carriers, low-cost carriers will exceed the functionality offered by legacy carriers while reducing call-center operating costs.

Airport Infrastructure

Working together with airport authorities, low-cost carriers will introduce baggage transfer and transit facilities, but only if (1) passengers are willing to pay a service charge for the privilege or (2) airport authorities are willing to pick up the incremental costs. In Europe, airport authorities will likely subsidize significant

connecting architecture, as long as transiting passengers are guided into retail halls. When freed from collecting bags, re-checking and clearing security, transiting passengers have more time to shop, a high-margin proposition for airports. Airlines will have to solve security screening issues for baggage, especially for connections between regional and intercontinental low-cost carriers.

Transit Insurance

Low-cost airlines will look to third-party travel insurance providers for extra-cost connection insurance. This travel insurance will provide hotel accommodations or alternate ticketing to passengers who are stranded at connecting points by late arrivals or outbound cancellations. This insurance will be remarketed by low-cost airlines as an add-on to bundled itineraries.

Low-cost carriers will look to third-parties (airports, insurance providers, etc.) to take on the additional costs of bundling. The bundling phase is as much about finding profitable new services that customers are willing to pay for (baggage transfer, insurance, etc.) as avoiding taking responsibility for the high-cost components of the standard IATA agreement. Joint pricing and schedule coordination are facilitated by low-cost, Web-based technology links that can be introduced at little additional cost.

Modified IATA

If low-cost carriers are successful in developing endorsement and bundling links, some may branch out and enter into non-alliance partnerships with other branded specialists. Specifically, it is likely that international specialists (i.e., Virgin Atlantic, Qatar and others) may seek low-cost carrier partnerships to feed traffic to spoke cities. These agreements would likely take the form of modified IATA structures, with inventory coordination and departure control coordination.

It is unlikely that the larger low-cost carriers would even consider these types of agreements until the validity of the first phases were demonstrated. Unless entering into a heavy IATA-style agreement could quickly result in incremental high-margin traffic, the adjustments to business models and operating strategies would not be cost effective. More importantly, building endorsement and bundling drives low-cost airlines to expose their reservations, customer management and departure control systems through Web-based interfaces. Those interfaces make it more cost-effective to coordinate with legacy airlines and international specialists in the future.

Summary

Low-fare partnerships will be measured by the cost of integration and the incremental service that arises from network integration. Because of the relative simplicity of building Web-based interfaces between reservations and inventory systems, many low-cost carriers have already integrated with rental car, hotel and other travel companies. Building similar links with other airlines is a straightforward process.

The introduction of intercontinental low-fare service should trigger regional low-cost carriers to start new partnerships at the referrals phase. Listing New York and secondary US destinations on a European LCC's Web site is a low-impact change that opens large new connecting markets. The pace at which referrals arrangements evolve into the endorsement and bundling phases will be determined by the perceived effectiveness of incremental revenue generation that efforts product, and by the impact of such alliances on legacy airlines.

Section 5

Conclusions

Low-cost carrier partnerships will emerge in sequential stages as carriers test the costs and benefits of increasing integration.

This white paper has reflected on several basic themes. The rapidly changing industry is entering a new phase of competition. While legacy airlines retrench with lower cost structures and retreat to core hub markets, low-cost airlines and service innovators are building their route networks at a blinding pace. Service innovators are steadily capturing high-end market share from legacy carriers, at a time when legacies must rely on that high-end traffic to subsidize loss-making operations on domestic and regional routes.

In coming years, the evolution of the industry will be governed by competition for business passengers. Business passengers can be divided into three categories: price-driven customers searching for the lowest fares, network-driven customers looking for the most flexible itineraries and network scope, and product-driven customers looking for the most comfortable product. Because low-fare competition has been restricted to regional theaters, business competition on global itineraries has been restricted to network-driven and product-driven segments. High global fares have supported price competition by legacy carriers on domestic segments and triggered legacy route realignment in favor of international capacity.

As low-cost carriers expand and enter new intercontinental markets, these carriers will change the competitive dynamics of the industry. Regional low-cost networks are already pervasive, and low-cost international airlines like maxJet will connect focus cities for low-cost carriers. Starting in 2005, price-driven business passengers will have a new alternative for long-haul travel: the composite itinerary. By booking multiple tickets on several low-cost carriers, business and leisure passengers will be able to travel on global itineraries at a fraction of today's fares.

Low-cost carriers will build cross-marketing and sales partnerships to attract these value-driven passengers to their networks. Technology changes will facilitate

single-site, multiple-ticket bookings so that customers can book a complex itinerary from one LCC's site. Carriers may investigate value-added services that provide the conveniences of traditional interline agreements without the burdensome costs and infrastructure of legacy code-shares.

The impact of these partnerships on legacy carriers will be profound. Partnerships of low-cost carriers will collapse legacy fare structures across international networks, leaving only slot-controlled and bilateral-protected markets as markets where legacies can command exorbitant fares. These partnerships will draw global, high-yield passengers to regional low-cost networks, facilitating growth and filling empty seats. Partnerships will allow low-cost carriers to sustain rapid fleet growth, enter secondary markets and add frequencies to build local market share. Most importantly, legacy airlines will lose valuable profits that had been used to attack low-cost carriers.

Legacy airlines will face a choice as they evolve. Today's single-front war against regional low-cost carriers will evolve into a multi-front fight for life. No amount of cost-cutting will result in an equivalent cost structure to specialists, whether they are service innovators, regional LCCs or new transatlantic low-fare carriers. Legacies will have to simultaneously compete with high-value service innovators like Emirates and Virgin Atlantic that will attract product-driven business customers, and battle low-cost alliances for price-driven customers. Even corporate contracts will be threatened as low-cost carriers combine their networks to offer corporations one-stop deals.

The question is not when these partnerships will evolve; they have already started. The question is what the legacy hybrids of tomorrow will look like, and how they will parlay small-market and hub strength into sustainable, long-term profitability. While today's legacy alliances offer global travel options, tomorrow's low-cost partnerships will bring low-fare travel to both large and small communities. Defending this LCC network growth while concurrently retaining market share from service innovators is a formidable challenge.