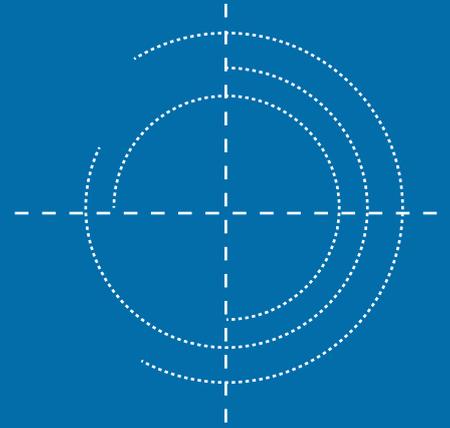


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# 3D Insight

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# Inter-Airline Cooperation

The “tragedy of the commons” metaphor resonates strongly in modern commercial aviation. In Garret Hardin’s 1968 Science publication he describes a dilemma in which multiple individuals acting independently can ultimately destroy a shared limited resource even where it is clear that it is not in anyone’s long-term interest for this to happen.

The original article used the metaphor of several shepherds sharing a piece of land. It is in the best interest of each individual to graze as many animals as possible on the land; however, if everyone makes this decision, the land will be destroyed and all herds will suffer. Similarly, the independent behaviors of multiple airlines operating in the same market are likely to result in the development of predatory behaviors that erode the total market value. The barriers to entry and growth in aviation are relatively low, constantly creating more “shepherds” to compete in a set “pasture.” At the same time, there are high barriers to a natural exit.

Fortunately there are cooperative solutions to these challenges, each characterized by different levels of risk and return determined by the degree of harmonization and integration among the participants. The solutions, which include interline agreements, code shares, alliances and mergers and acquisitions, have many strategic advantages over a unilateral approach; however, participation is contingent upon other carriers and stakeholders agreeing to cooperate. Agreement of participants is never guaranteed, particularly when regulatory bodies and governments are involved, and as such the opportunity to pursue each initiative is not always present. Carriers must therefore determine the opportunities available to them and pursue those which offer the greatest value.

The industry is rife with destructive competitive

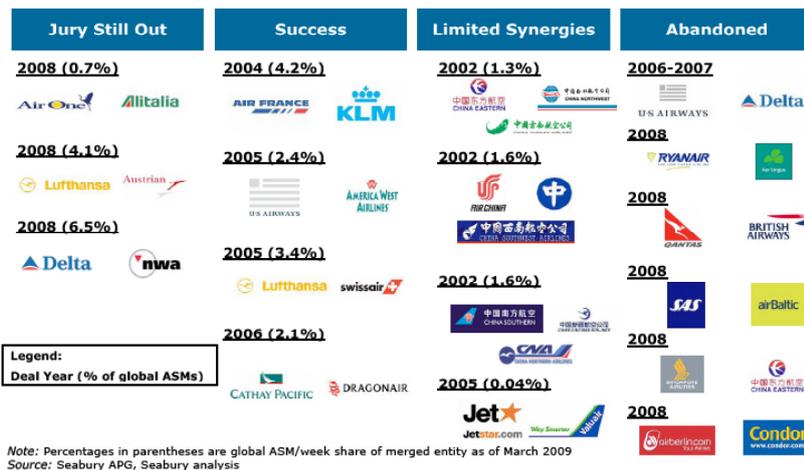
behaviors. Fleet expansion (larger herds) and price wars are all too common. These behaviors are fueled by other market participants – governments, OEMs, airports – that have a vested interest in capacity growth. Acting in one’s own self interest can yield benefits if competitors exit the market, but if the majority of players remain – or if a continual influx of new competitors and new capacity enter the market – the available value for all participants is eroded. Several initiatives can be pursued to return value, but they require a paradigm shift from competitive to cooperative relationships with other carriers.

Aviation executives have been calling for cooperation and consolidation as a solution to the myriad of problems facing the industry. In the current environment these discussions are being approached with new vigor. The promise of consolidation is higher returns and decreased risk through the establishment of a dominant entity with control of capacity, pricing power and economies of scale. Despite the attention that mergers and acquisition (M&A) transactions receive from the media and financial analysts, the reality is that there are many barriers to these activities (see table 1). For these reasons, successful M&A transactions are challenging, with most full consolidation attempts failing to deliver perceived value or abandoned prior to integration (see table 2). Executives should remember that while airline M&A transactions are able to unlock great benefits, they also

Tab 1 - Barriers to Consolidation

		Risk
<b>Operational constraints</b>	<ul style="list-style-type: none"> <li>~3,000 bilateral agreements restricting route access &amp; frequency</li> <li>Antitrust and competition regulations</li> <li>Protectionist government actions to protect flag carriers</li> </ul>	
<b>Ownership constraints</b>	<ul style="list-style-type: none"> <li>Statutory requirements for majority local ownership</li> <li>'Substantive ownership' clauses in bilateral agreements</li> </ul>	
<b>Labor</b>	<ul style="list-style-type: none"> <li>Union opposition and activism</li> <li>Harmonizing contracts/seniority without shifting to higher common base</li> </ul>	
<b>Shareholder/management support</b>	<ul style="list-style-type: none"> <li>Shareholder skepticism of real merger benefits</li> <li>Management disagreement on issues of merged team &amp; control</li> </ul>	
<b>Other/Logistical</b>	<ul style="list-style-type: none"> <li>Systems integration (eg IT, reservation systems)</li> <li>Fleet harmonization</li> <li>Capacity rationalization</li> </ul>	

Tab 2 - Recent M&A transactions



carry the greatest risk of any cooperative activity. Several lower-risk opportunities can net a material portion of consolidation benefits without the complexity, risks and regulatory hurdles of full merger.

The risk averse options sit under the umbrella of "inter-airline cooperation." These looser forms of cooperation have the additional benefit of allowing for multiple partnerships to be forged creating a diverse portfolio of cooperation. The term encompasses interline partnerships, code sharing and strategic alliances. As the level of cooperation and degree of harmonization escalate, so too does the relative value capture (see figure 1). The barriers and risks associated with M&A, particularly cross-border M&A, are often so large that this option is preferable in

only a limited number of scenarios. Inter-airline cooperation strategies can provide competitive advantage with less integration complexity and risk.

Interline agreements allow an airline to sell another carrier's flight under one ticket. These ticketing arrangements provide revenue uplift as the participants are able to collect revenue on a joint itinerary where it may have otherwise been lost. Further benefits may be achieved through increased customer satisfaction. If separate individual segments are purchased, the customer is exposed to delays, cancellations and the hassle of collecting luggage and re-checking it at the point of transfer. By purchasing a single itinerary, consumers gain confidence associated with knowing they will not be stranded and

forced to repurchase a ticket if operational disruption occurs.

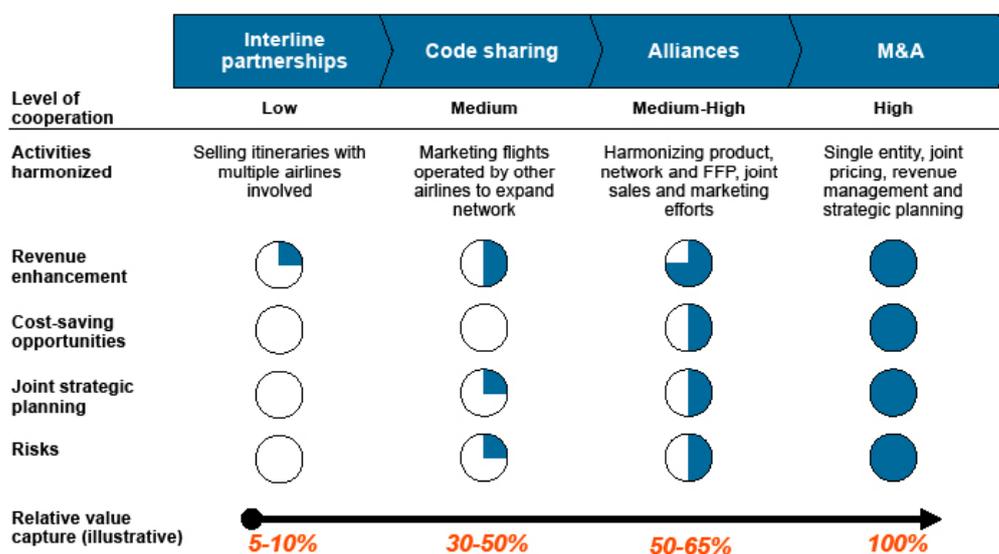
The next step to increasing cooperation is code sharing. Under a code share agreement, multiple airlines may market the same flight under different codes. In these arrangements, the airline operating the flight is termed the “operating airline” while those marketing it using their own codes are termed the “marketing airlines.” Operating carriers and marketing carriers must have interline agreements with all other carriers on an itinerary to allow single tickets to be issued. There is an increased degree of cooperation among carriers that goes beyond the superficial manifestation of multiple codes associated with a single flight. Carriers will frequently synchronize schedules to optimize transfer time and facilitate coordination of baggage transfer. The marketing airline gains an extended network and the perception of city presence in an un-served or underserved market, without requiring the dedication of a hull. Code shares can be particularly advantageous as a means of eliminating the problems associated with the “tragedy of the commons.” Excessive competition and overcapacity on thin routes - a primary driver of yield deterioration - can be eliminated through well-structured code shares. Both carriers can retain network/city presence while at the same time freeing capacity that can be redeployed to further strengthen the rest of their network.

In addition to the marketing, network and operational benefits of code sharing, great value is derived from improved positioning in booking systems. Itinerary search engines give preference to direct flights, followed by layover

flights with a single flight number, then flights with multiple airlines under one ticket (interline) and finally flights with multiple carriers requiring segments to be purchased separately. Code sharing gives the perception that the itinerary is operated by one carrier under a single flight number, improving the position of the itinerary and increasing the likelihood of purchase by the customer or booking agent. Purchasing behavior may be further influenced by allowing customers to earn points through the frequent flyer program of the marketing airline.

Just as code shares evolved from increasing cooperation beyond that associated with interline agreements, strategic alliances leverage a further degree of harmonization among participants to capture greater value. It is clear that alliances are expanding their global breadth (see figures 2 and 3). Since 2000, the number of carriers participating in the major global alliances has grown from 26 to 68, with capture of global available seat kilometers (ASKs) rising from 43% to 58%. Participation in these alliances is attractive for many carriers as membership holds the promise of revenue enhancement, cost reduction and improved customer satisfaction. The primary drivers of these benefits include revenue uplift through network and FFP harmonization and cost-rationalization through sales and marketing, maintenance, facilities, labor and purchasing improvements. Participation in an alliance is dependent upon invitation. Alliances make invitation decisions based on scale, traffic flows, ability to integrate IT systems, capture of premium traffic and the ability to enhance, rather than threaten, the position of dominant members in the alliance.

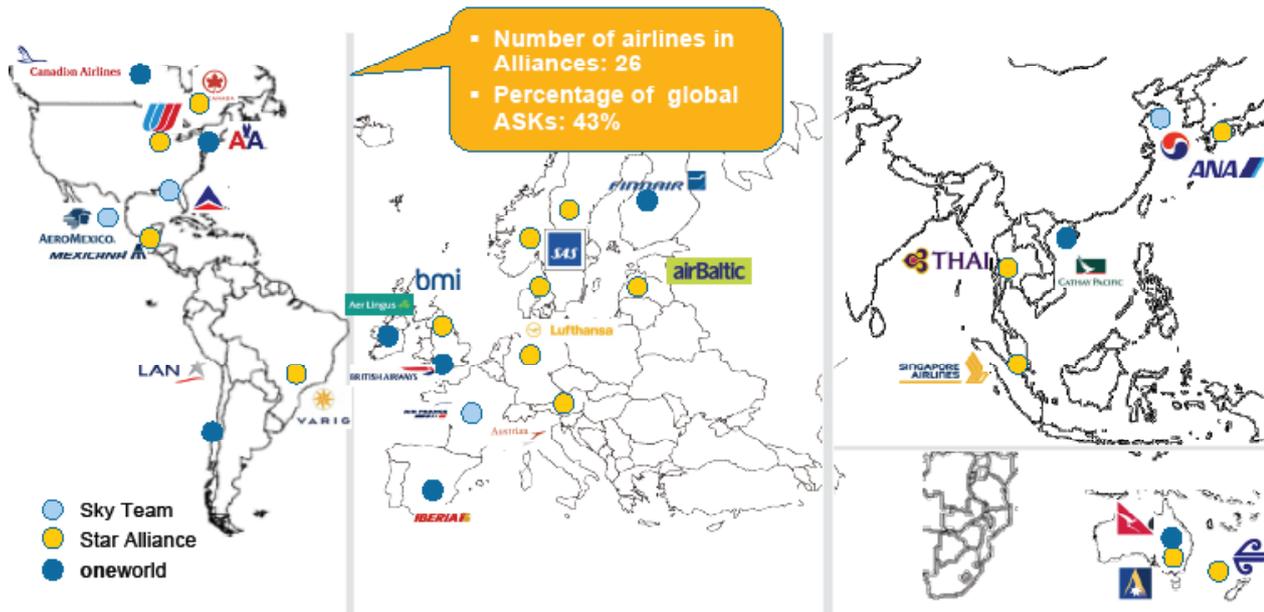
Fig 1 - Forms of consolidation. Carriers can, and do, achieve a material portion of the benefits of consolidation without the complexity, risks and regulatory hurdles of full merger.



Source: Seabury analysis

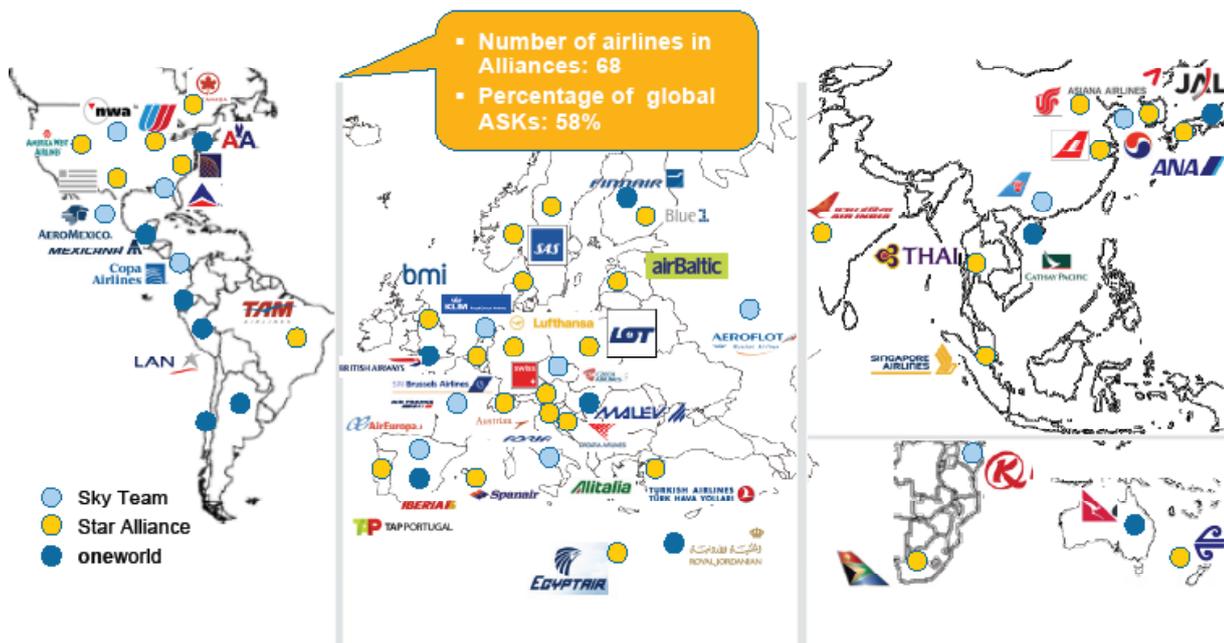


Fig 2 - Global Alliance membership since 2000



Source: Seabury analysis, alliance websites

Fig 3 - Global Alliance membership since 2009



Source: Seabury analysis, alliance websites

Arab carriers have low representation in the major international alliances, primarily due to the perception that many of the carriers pose a threat to Europe-Asia Pacific traffic flows. Majors in both regions (eg British Airways, Cathay Pacific, Japan Airlines and Qantas in oneworld, Lufthansa, Singapore, Thai and Air China in Star Alliance or AF-KLM, Korean and China Southern in SkyTeam) would likely feel vulnerable at the introduction of a major Arab carrier to their alliance. Because major Arab carriers operate parallel routes connecting European and Asian hubs, they may be viewed as a challenge, rather than enhancement, to the position of the dominant members.

AACO members have another alternative: Arabesk, a regional non-binding alliance. Arabesk is a regional network alignment initiative designed and championed by AACO exclusively for AACO members. Participants derive value through reduced duplication of capacity, linked networks and destinations, improved customer connectivity and maximized capacity utilization through route sharing and rationalization. This cooperation overcomes many of the market hurdles described by the 'tragedy of the commons' and ultimately fosters the successful growth and profitability of Arab carriers.

The chronic problems of the airline industry are rooted in margin destroying relentless growth ("tragedy of the commons") and the juxtaposition of highly cyclical demand with relatively fixed capacity and costs. Industry consolidation is seen as part of the solution to these problems. Regulatory and political barriers make true consolidation slow, with most transactions abandoned or failing to deliver value. Cooperation, rather than M&A consolidation, among carriers continues to offer opportunities to capture value at reduced levels of risk. These opportunities should be an important component of any long term growth strategy.

# Cost, Liquidity & External Cooperation:

## Contract renegotiation, joint purchasing programs and outsourcing with vendors/ MROs/other airlines

Airlines are able to unlock significant inventory and supply chain benefits, both in terms of the balance sheet and the P&L, by increasing cooperation with external entities. Eroding yields, reduced passenger numbers and difficult credit market conditions have put significant strain on virtually all carriers. In an effort to limit losses or sustain profitability, carriers have employed a variety of strategies: eliminating flights, reducing staff, grounding aircraft, accelerating fleet retirement and seeking capital injections from governments/ investors. Pursuing these initiatives is difficult as the effect on employee morale and/or customer satisfaction can be significant. As an alternative to these approaches, executives should be conscious of opportunities afforded through creatively designed – or thoughtfully restructured – vendor contracts. These initiatives, which include restructured payment terms, contract duration, defragmentation of supplier portfolio, joint purchasing programs and outsourcing strategies, drive benefits by re-allocating risk and capital to where they can be managed more efficiently: at the supplier level. The suppliers' scale and specialization position them to reduce a carrier's inventory management and financing costs, making

restructured supplier agreements effective means of driving liquidity and profitability improvements.

Extension of payment terms represents the simplest vendor cooperation strategy that can yield short-term liquidity improvements. Liquidity is improved by delaying the remuneration of debts. Although this stabilizes the balance sheet in the short term, these initiatives may have unintended consequences. For example, suppliers may require larger minimum purchases and/or demand higher unit prices as a trade-off for providing extended credit terms. A more sustainable approach is to negotiate better contract terms by exchanging contract length for decreased unit costs. Suppliers may be willing to accept smaller margins as a substitute for the security of locking-in a long-term revenue stream.

A more holistic approach that extracts value from increased cooperation with suppliers is the consolidation of repair contracts. The procurement portfolio of most airlines is characterized by a large number of specialized suppliers.

The size and fragmentation of this network drives management complexity into the procurement organization. Inviting competing suppliers to vie for an entire maintenance portfolio can create substantial revenue uplift for the winning supplier and cost reduction for the airline. Essentially, an executive can create scale within his/her organization by combining elements that were previously tendered on individual agreements. The fact that different contracts bear different terms makes the transaction all the more attractive to consolidators because the winning vendor can transition repairs into its own shop as old contracts expire. The airline benefits from decreased costs and a reduced number of suppliers/contracts.

Creating scale through joint purchasing programs with other carriers can also be a powerful tool when negotiating vendor contracts. Alliances have tried to leverage their scale in procurement of aircraft, maintenance services and commodities, such as fuel. AACO recognized this value, orchestrating reductions in fuel procurement costs and distribution charges by leveraging the scale of the group to achieve price concessions. However, some pooling strategies have failed as a result of the complexity of managing the interests of so many entities. For instance, Star Alliance attempted to pursue an agreement on aircraft commonality from its membership. In addition to increasing bargaining power with aircraft manufacturers, it hoped to improve operational flexibility by enabling carriers to swap delivery slots or dry lease aircraft to each other. These efforts eventually fell short of expectations due to the vast differences among the members.

Alliance carriers are characterized more often by differences than similarities. They operate a wide range of fleet types, have varying degrees of balance sheet strength, and, most important from an integration perspective, have significant cultural differences. The pursuit of a Star Alliance procurement strategy failed in large part due to these hurdles, despite strength in the underlying principles. Shared language and a common pan-Arab culture may better position AACO members to overcome some of these difficulties.

The most advanced form of airline-supplier coordination is an outsourcing strategy. These agreements go beyond the benefits of improving

parts inventory and allow for the ability to sell capital assets as well as exit facilities leases. Furthermore, an outsourcing strategy may allow for the consolidation of multiple airlines' volumes, further driving down the unit costs for the entire consortium of participants. Under the terms of an outsourcing agreement, the carrier relies completely on the capabilities of the outsource provider. Many carriers choose to outsource spares (eg engines, rotables or expendables) to leaseback, pooling or consignment programs. Historically, airlines have preferred to hold these assets close, keeping tens if not hundreds of millions of dollars worth of spares on hand. The advantages of transferring spares management to a reliable supplier are exhibited by the most nimble, new-generation carriers. These include a large cash influx at sale, with better than market prices often achieved by appending repair or procurement agreements.

A final element of close collaboration between airlines and suppliers is risk-sharing. Arrangements that transfer and align supply chain and financial risks outside of the carrier's organization are increasingly common. For instance, nearly half of engine maintenance agreements are structured on a cost-per-hour basis. Similarly, larger MROs offer end-to-end power-by-the-hour agreements that transfer a large part of the risk to the supplier.

Closer cooperation with vendors offers significant, and often untapped, near-term liquidity and long-term cost opportunities for carriers. These opportunities are also likely to improve a carrier's ability to access vendor financing as one can trade P&L for liquidity with the vendors. In addition to financing benefits, these cooperative strategies also circumvent many of the industrial and public relations hurdles that stymie so many labor and cost-reduction strategies. For each of these approaches, carriers must fully understand their cost drivers to enable judgment of the long-term financial implications that closer collaboration with industry partners can bring. The volatility of 2008 has changed the aviation landscape, and it is prudent for executives to explore new strategies that shore up weakened balance sheets and bolster waning profitability. Vendor contract restructuring can be a valuable tool for executives to wield as they endeavor to restore the financial health of their airlines.

# Breaking Down Barriers



Increased collaboration can positively impact your bottom line

Airline Executives have the responsibility of defining and implementing sound strategy for company growth. The daily responsibilities of this role include communicating with the Board and other stakeholders, managing operational issues, addressing regulatory concerns, and ensuring that compliance requirements are met. Additionally, there is the responsibility to provide counsel to internal leaders to help them achieve departmental goals, as part of the company's overall strategic focus.

Resolving conflicts and handling day-to-day issues as they arise can help ensure that the process stays on track. Executives who empower, enable and require their leaders to focus on eliminating distractions have more time to concentrate on strategic responsibilities, which are critical to the airline's long-term success.

One tactic is to develop and focus leaders on identifying and breaking down boundaries across business units and work teams to increase cooperation and communication throughout the organization.

## Natural Tensions

Within any airline, there are natural tensions and exchanges that can cause stress and create inefficiency. Boundaries exist because of conflicting goals, strategies, measurements, structural differences, location and proximity of personnel, and general misalignment on priorities.

One example is the conflict that can develop in the relationship between gate agents focused on providing excellent customer service by allowing the last "late" passenger to board and the operations staff and crew whose objective is to depart on time.

In the case of aircraft utilization and maintenance control personnel, one group is interested in conducting a careful series of complex tasks, persistently checking for the slightest change in detail, while the other's goal is to get the aircraft out on time.

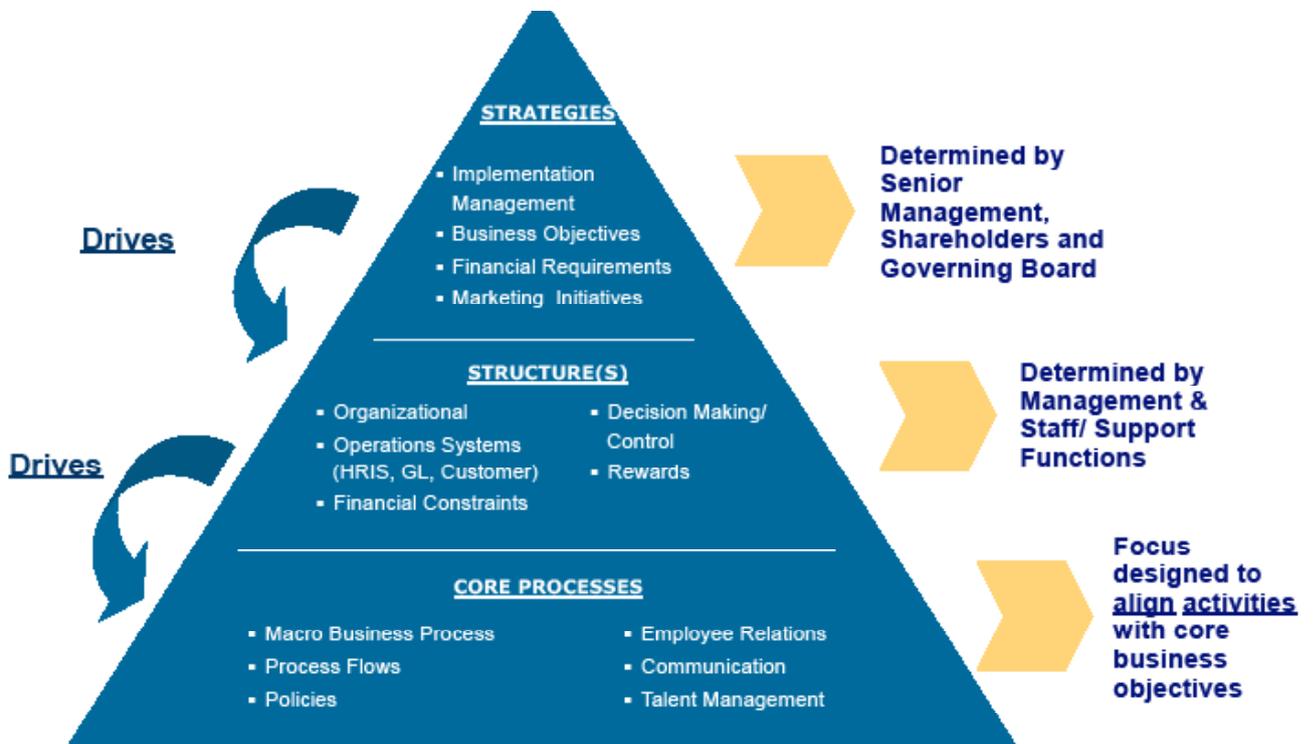
In order to lead and grow the business, executives must ensure that teams and individuals work well together and communicate effectively. If there is a lack of collaboration and cooperation among groups and teams, it could (and often does) negatively impact on-time performance,

schedule reliability, Crew utilization, passenger satisfaction, or, in the worst cases, passenger safety.

Mastering the overall process involved in reducing tensions and breaking down boundaries can result in improved organizational performance (see figure 4). It is critical to first ensure that leaders do not have conflicting goals, misaligned structures or confusing processes at the top. The key is to facilitate a strategic discussion that aligns these Executives on their own direction in

order to help them drive that direction down to the entire organization. Once leaders are clear about the strategy, structure and processes, and have effectively communicated it to the rest of the organization, employees can better understand how their individual roles fit, both "in" and "across" the airline. Successfully implementing this process can influence productivity levels and lead to improved business results across the organization.

Fig 4 - All organizational activities should fall within business strategies as support mechanisms. Effective processes should be aligned with and driven by strategies - not independent of them.



Source: Seabury OCI

## Increased Collaboration

The result of effectively utilizing this process can have significant impact. For example, Seabury worked with Crew Schedulers who owned a process that impacted job satisfaction for the Crew. The problem affected morale and crew attitudes. We listened to the different perspectives, encouraged clarity of communication, and outlined what specific behaviors needed to change. In creating a consistent coaching approach for Managers, both barriers and conflicts were addressed. The process also helped Managers hold schedulers accountable for specific (and now clearly understood) behaviors. Schedulers had a clear perspective of their critical roles, which reduced their stress and relationship tension. This resulted in a substantial improvement of the Crew's attitude toward the airline -- and ultimately -- the passengers they served. When employees felt more valued, they became more productive, which

improved relations with both internal and external customers. Passengers recognized a difference, and Managers had more time to focus on other initiatives.

Are there any real or perceived boundaries in your organization that are so strong and defined that they make it difficult for information to flow in proper channels? Are there times when people focus too much on the problems as they occur and not enough on proactive problem-solving and critical decision-making? Do you want people to change certain behaviors, but find that you haven't given them an understanding of how their role relates to the overall strategy? As an airline Executive, ask yourself: if I have to get directly involved in each of these discussions and conflicts, how much is this costing my organization? And how are my customers affected?

## Big Payoff

Improving cooperation and collaboration across the organization can eliminate inefficiencies, helping to propel your airline forward by achieving key financial metrics and improving communication and cooperation. Executives who are able to apply resources to break down barriers, facilitate alignment and eliminate inefficiencies increase their time and ability to focus on what's most important. When employees understand business goals and how their roles relate to achieving them, they feel valued and respected and can focus on contributing more to the organization, which directly impacts your bottom line.

# Statistics - Q4 (2008)

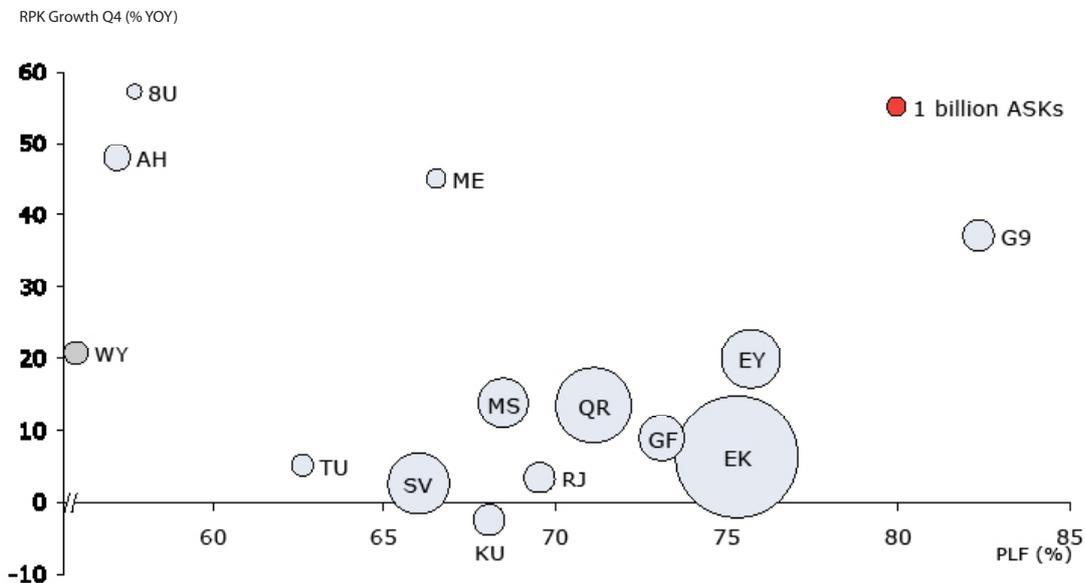
Executive Summary

Includes scheduled operations for 8U, AH, EK, EY, G9, GF, KU, ME, MS, QR, RJ, SV, TU and WY  
 Statistics cover fourth quarter 2008 operations  
 Source: AACO

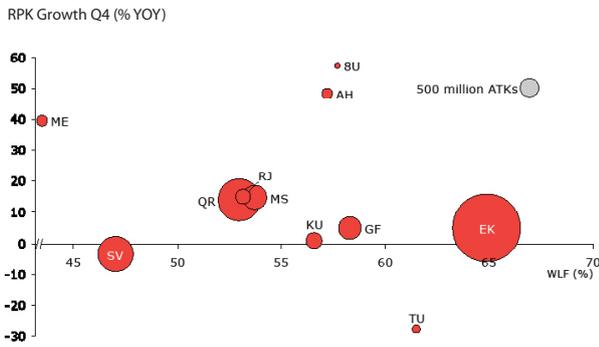
	Total	Q4 Year on Year Change	International	Q4 Year on Year Change	Domestic	Q4 Year on Year Change
No. of Pax	18,604,767	5.5%	15,383,293	6.4%	3,207,832	2.2%
Tonnes Cargo	612,128	3.8%	597,687	4.3%	14,432	-4.4%
RPKs (000)	55,588,570	9.1%	53,187,461	9.4%	2,397,671	4.6%
ASKs (000)	78,061,716	10.7%	74,672,322	11.4%	3,381,678	-1.8%
Pax Load Factor	71.2%	-1.01%	71.2%	-1.31%	70.9%	4.4%
RTKs (000)	7,728,474	6.2%	7,503,783	6.4%	224,379	1.5%
ATKs (000)	13,255,123	7.5%	12,822,836	7.8%	431,340	-1.6%
Weight Load Factor	58.3%	-0.66%	58.5%	-0.77%	52.0%	1.58%

Fig 1 - Year-on-year revenue passenger kilometer (RPK) growth versus passenger load factor (PLF).  
 Bubble size indicates carrier size measured as available seat kilometers (ASKs)

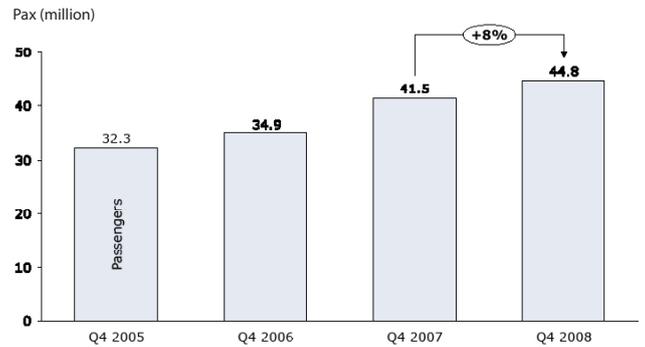
Source: AACO



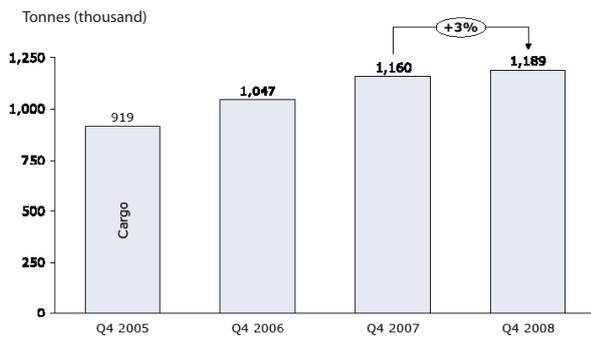
**Fig 2 - Year-on-year revenue tonne kilometer (RTK) growth versus weight load factor (WLF).**  
Bubble size indicates carrier size measured as available tonnes kilometers (ATKs)  
Source: AACO



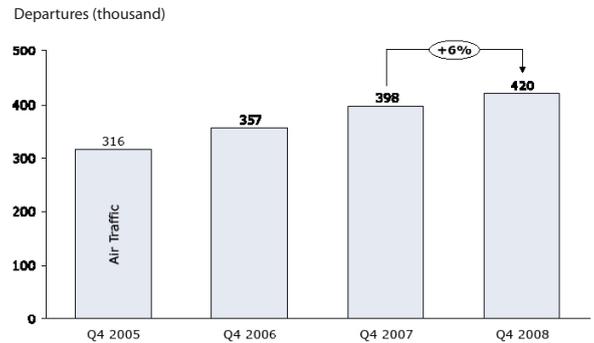
**Fig 3 - Historical trend of fourth quarter passenger transit volume in most Arab airports**  
Source: AACO, ACI



**Fig 4 - Historical trend of fourth quarter cargo transported in most Arab airports**  
Source: AACO, ACI



**Fig 5 - Historical trend of fourth quarter aircraft traffic volume in most Arab airports**  
Source: AACO, ACI



**Fig 6 - Fourth quarter intra-regional passenger volume historical trend**  
Source: AACO, IATA

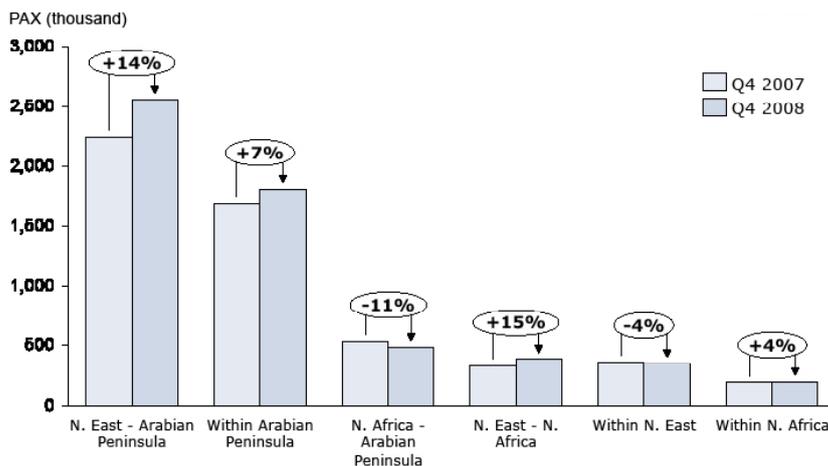


Fig 7 - Fourth quarter inter-regional passenger volume historical trend  
Source: AACO, IATA

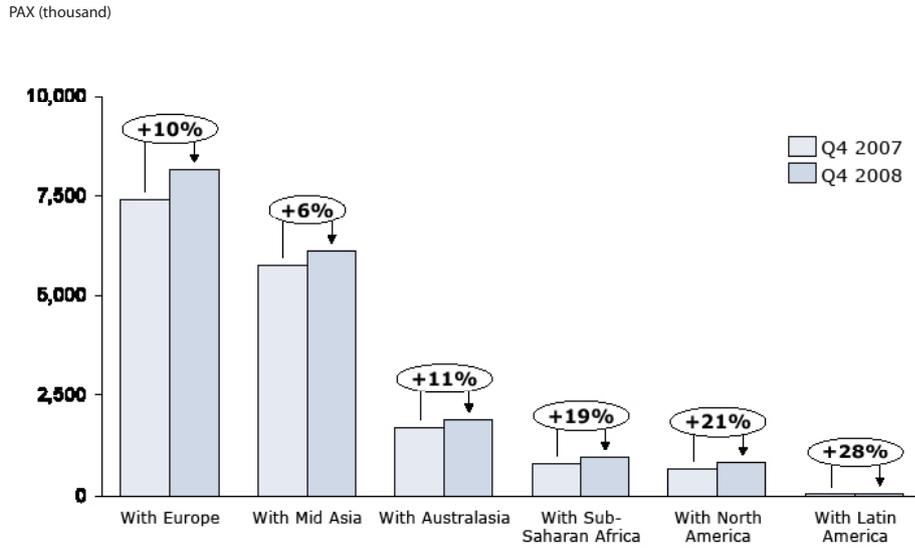


Fig 8 - Fourth quarter passenger volume in most Arab airports by port  
Source: AACO, ACI

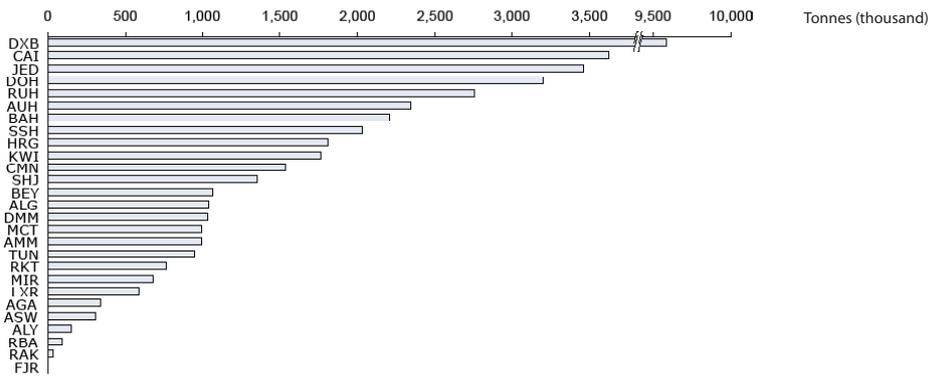


Fig 9 - Fourth quarter passenger volume in most Arab airports by port  
Source: AACO, ACI

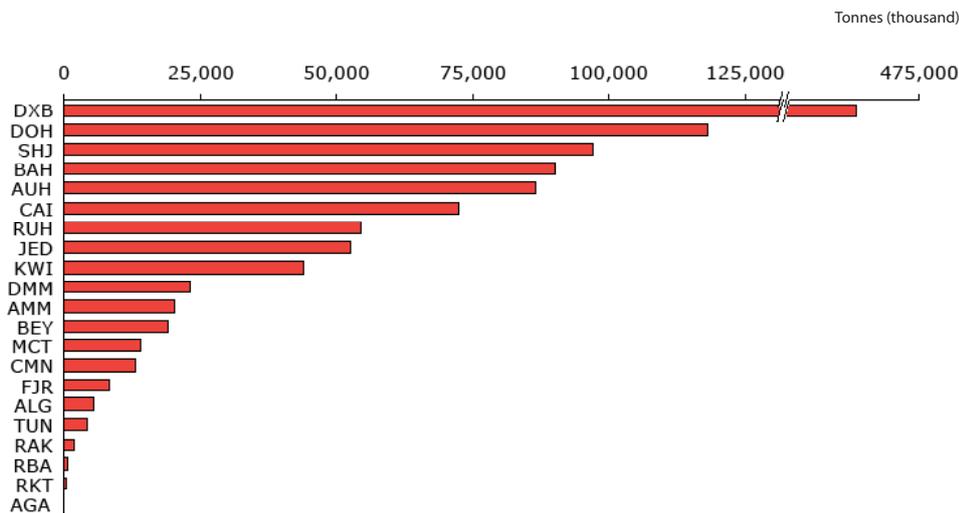


Fig 10 - Fourth Quarter domestic/regional and international passenger volume historical trend

Source : AACO

Note: Includes scheduled operations for 8U, AH, EK, EY, G9, GF, KU, ME, MS, QR, RJ, SV, TU, WY

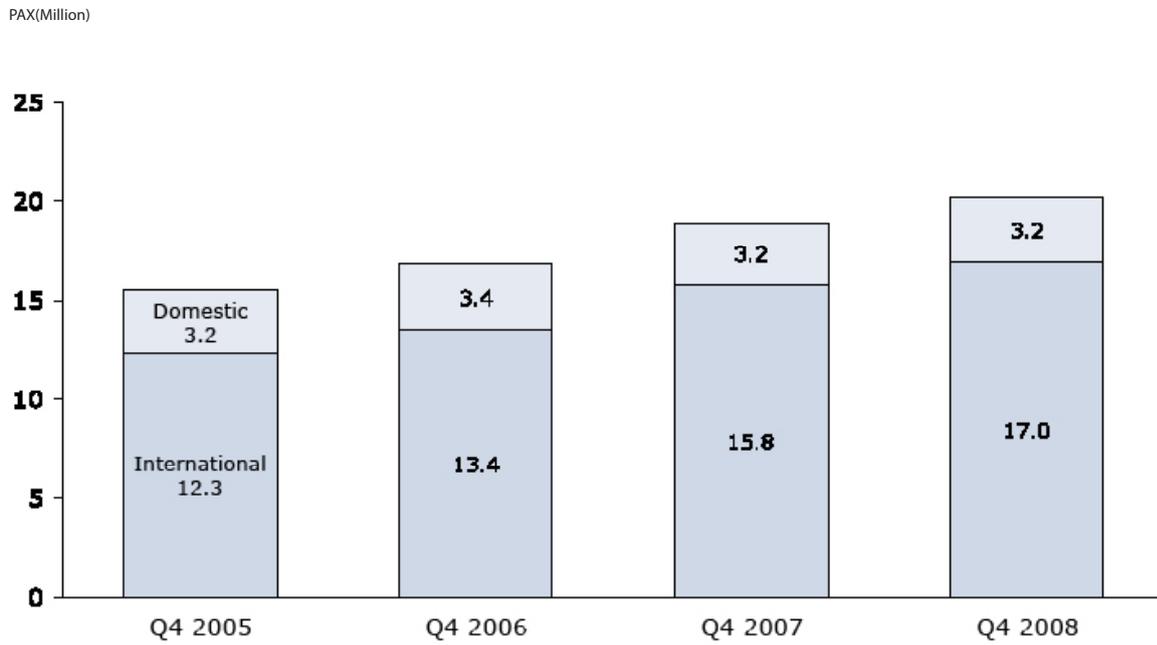


Fig 11 - AACO members combined fleet growth by aircraft type.

Source: AACO, ASCEND

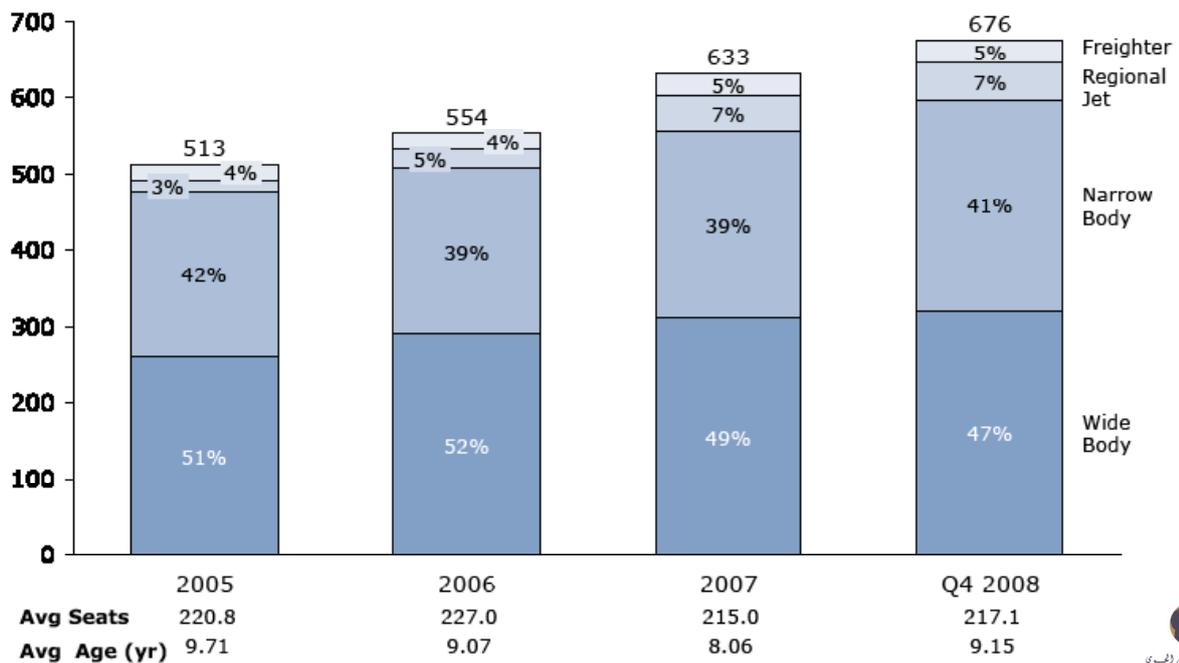
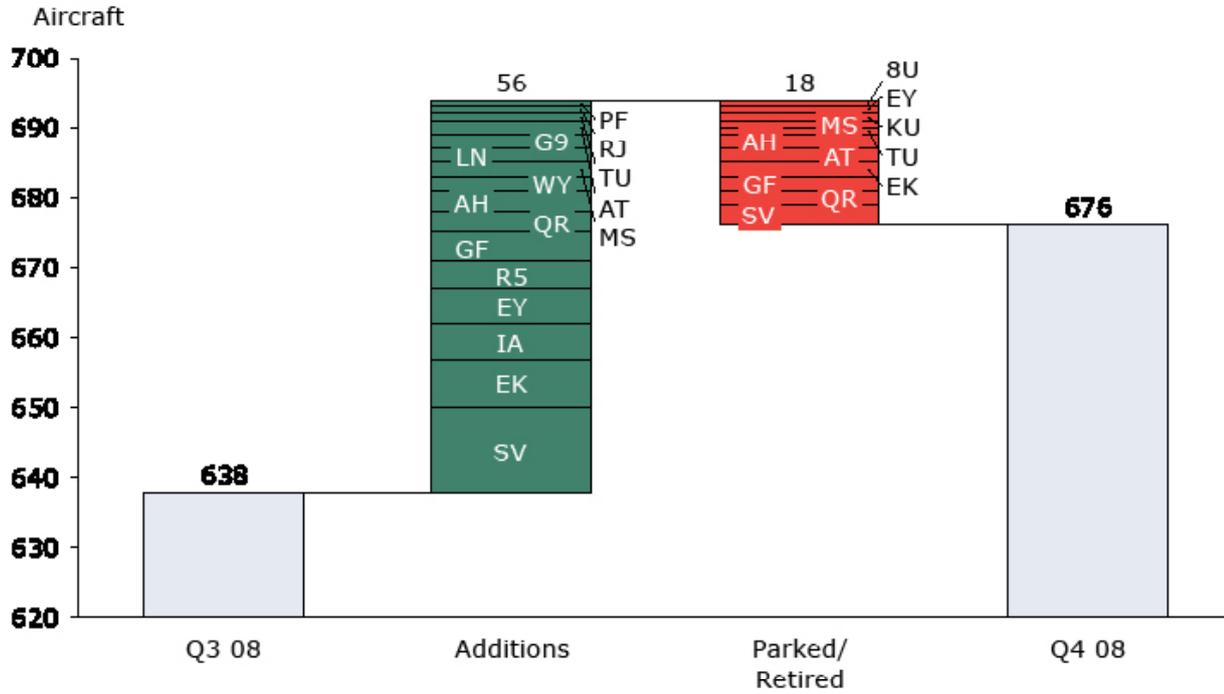


Fig 12 - Fourth quarter changes to the AACO fleet by carrier.

Source: AACO, ASCEND



[www.aaco.org](http://www.aaco.org)

Seabury Aviation & Aerospace is the largest global advisory firm dedicated to commercial aviation and its related businesses. The experience of our 180+ professionals in strategy, operational cost reduction and restructuring is unparalleled.

Our unique team structure sets us apart from other advisors. We integrate the analytics of top-tier strategy consultants, the functional depth of technical experts, the financial acumen of top bankers and the experience of former senior executives.

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