The Future of the Aircraft Cabin

Tracking Trends and Debunking Myths

Aviation has been stuck in the past, holding on to antiquated concepts of cabin configurations by a strict two, three, or four class divide. This thinking has only served to foment resentment in the majority of passengers sitting at the back. Leading visionaries of aviation industry cabin design share their views on class structure, the challenges and complications of designing for the needs of a variety of travelers, as well as insights into the misconceptions of what is happening behind the scenes of the aircraft interiors design industry.

By Marisa Garcia+ Skift Team

WWW.SKIFT.COM
Get the twice-monthly Skift Trends Report for the latest intelligence on the travel industry.

Each edition in our new series of reports will brief you on a specific trend, providing insight into the current state of the market, the context around the trend, and where the industry is heading in the near future.

After you subscribe, you will receive 24 reports direct to your inbox for an entire year. Reports are delivered as a downloadable PDF.

For any comments or questions, email us at trends@skift.com.

For more information on past reports go to Skift.com/travel-trends.
Executive summary

The Aircraft Interiors Industry is going through a boom and entering what one designer has called a second Golden Era. This may seem dubious to certain readers, concerned over trends of higher cabin density and oddly designed seats which seem targeted directly at annoying passengers, making them more uncomfortable in flight.

According to the most recent edition of the comprehensive “Bible” of Aircraft Interiors, Jetliner Cabins, by Jennifer Coutts Clay, the Aircraft Interiors Market was valued at $8.4 Billion in 2014, and expected to grow to approximately US$12 Billion by 2016.[1]

This is a time of some passengers enjoying apartments in the sky, while others complain of feeling like tinned sardines. It is a time of great developments in technology which garner media attention, and other, also technological developments, which fly under the radar, greatly benefiting the possibilities for design and comfort in the cabin, but never noticed by passengers or the media—which, in a way, is the point. These silent benefits are not intended to be noticed, but to contribute to an overall improvement in cabin conditions.

The concept of class in cabins is shifting, and we’ll learn that it may shift even more in the coming years in what could be a revolution of cabin lay–out which will one day make passengers wonder how we ever managed to fly any other way.

We’ll look at some of the reasons behind the trends of cabin density and also look at trends for increased comfort—not just for the wealthiest passengers. We’ll separate reality from the stuff of dreams, and the from the stuff of nightmares. We’ll introduce possibilities, and debunk myths.

As we analyze the trends for aircraft cabin developments, we’ll discuss the manifold approaches taken to overcome safety limitations, and other limitations inherent to this very unique method of transport. We’ll address the problematic issue of customer perception of the product, and find out what the future has in store. To give our readers the best possible insights into these mysteries, we’ve gone directly to the designers who work expertly in this element, who balance between the needs of passengers and the needs of airlines, while also ensuring the needs of a safe aviation infrastructure are met.
It’s important to remember that the aircraft cabin is no more than an illusion of solid structure and volume, creating a sense of security, comfort and isolation from the elements, at elevations not fit for humans, within what is a surprisingly thin aluminium or composite shell. The aircraft cabin is not an environment akin to any other spaces on the ground. A large part of the elements which must go in the cabin are dedicated to insulation, to controlling cabin pressure, to ensuring the safety of passengers. Every element of the cabin components put inside the aircraft must comply to stringent regulations governing their properties for fire conduction and corresponding toxic emissions, as well as meeting dynamic testing requirements to resist sudden movements from turbulence, or to hold-up well enough in the event of a crash so that passengers can evacuate.

Many of these regulatory developments are born of lessons-learned from a time when aircraft crashes (and cabin incidents in flight), were far more common than they are today. During what many consider the Golden Age of aviation, aircraft structures did not meet these requirements, and which, to those familiar with the physics and dynamics behind today’s regulations, seem unconscionable, though they were born out of ignorance of the risks—with tragic deadly results. Because of these lessons learned through loss of life, the elements of design in the aircraft cabin have been restricted...
by a necessary and beneficial prioritization of safety over aesthetics. Therefore, developments in the cabin should be judged, not in terms relative to how cabins appeared in years before these safety factors were put in place, but by how they overcame the challenges of compliance to safety requirements while also providing an ever-increasing variety of comfort features.

Because of the perfect marriage of art and science in the developments of aircraft and aircraft cabins, passengers today are able to sit on board far more ease with their elevation, suffering the effects of pressure and lack of humidity less every day. The industry has also gotten smarter and more sophisticated about creating the illusion for passengers of being in a reliable, restful space, solid space—isolating them from the reality that they are still inside a very thin cylinder flying at very high speeds, at higher altitudes and for longer than ever before. This is the great feat of magic that those involved in aircraft and aircraft cabin design have accomplished—and they have only begun working their magic at 30,000 ft.
# Table of contents

**Executive Summary** 3

**Introduction** 4

**The Golden Age Wasn’t** 7

**Just How Far Could the Ever-Shrinking Economy Seat Shrink?** 10
  - The Rules 11
  - The Realities 12
  - The Physics 12
  - The Possibilities 13
  - No Gain in Pain 14

**Class Warfare** 16
  - Economy, Democratization, and a Class Uprising 17
  - Is Premium Such A Prize for Airlines? 19
  - How we got Premium Economy in the first place, and why we might lose it 19
  - How the definition of Premium Economy is evolving to make Cents 21

**It’s Business Class, no it’s First Class, no it’s Business Class** 23

**Hotels In the Sky** 25

**The Skies of the Privileged Few** 26
  - The Etihad Residence 27
  - Those Sweet Suites 27

**Tomorrow is going to look a lot like yesterday, but better** 29

**Insights and Strategies** 31

**Endnotes & Further Reading** 34

**About Skift** 35
Why do we look at the past of aviation with longing? Images of “better” days both Black and White and Technicolor abound, usually accompanied by comments on how much we’ve lost since those Golden Days of flight. But reality isn’t that black and white, and aviation certainly wasn’t a technicolor dreamscape “back then.” How much of that longing is informed by experience? How many of those who write about or pine for those “lost days of luxury” actually flew in those cabins, or in any aircraft, at the time? How much of that perception of loss is based on personal experience of loss? If it is not informed by first-hand experience, just where does this yearning for a long-lost past come from; and why does it have such a strong hold on the traveling public, leading to a negative perception of current flight conditions?

When we asked our experts these questions, across the board, they attributed this phenomenon to aviation nostalgia originating precisely because it was such an exclusive experience, and many could not enjoy it. In other words, because it was an experience reserved for the privileged few, there was an immediate association with luxury which today’s more democratic aviation landscape cannot match.

“Nostalgia may cloud reality. It is the same with the concept of the Belle Époque in rail travel,” says James Park, founder of JPA Associates, London, and a featured speaker at Skift’s upcoming Future of Travel Global Forum. “Yes, there was a high level of attendance and hospitality, but now we have safe, fast, and economic travel, still with a high level of hospitality. Now, aviation can accommodate a larger number of people, because it has become more affordable. For those who still want that Premium experience, today’s aviation is more comfortable.”

Park associates the nostalgia of aviation with a very human tendency to romanticize the past. “We often look at the past with rose tinted glasses,” Park tells us. “In the past, air travel was the glamorous thing to do for celebrities of the day. Now, people use aviation to get around. This also affects their perception of flying.”

As Park points out, the reality of that era was that the skies were the domain of a select, affluent affluent few—the exclusive privilege of VIPs and Celebrities.
Most who say they miss those better days, never lived them. Very few of those involved in the Aircraft Interiors Industry have any strong sentimental attachment to that period of flight; except where it inspires aesthetic and comfort standards to address that perception of loss. The perception of those working in the industry is not so much “look at all we’ve lost,” but “look at all we’ve gained.”

“Aviation is better now,” Nigel Goode, Co-Founder of Priestmangoode, London, tells Skift. “It’s quite an exciting time with airlines making many innovations. The perception is there because it’s so easy to fly. It’s such a frequent experience now. Budget air travel, providing cheaper fares, has made flying not so rare and special. For these reasons the experienced is perceived to be not as good, but there are a lot of interesting things under development.”

As Goode also points out: “The romantic images of the past are all based around VIPs, paying great deals of money.” Travel today is significantly more affordable.

This is supported by data presented by a number of sources tracking the industry. Airbus, for example, states in its most recent 2013-2032 Global Market Forecast[2]:

“It is possible to believe that the ability to transport a person to anywhere in the world, with less than a day’s travel time would come at a very significant cost to the traveler. In fact, this was the case. In 1941, it could have cost the average American more than a year’s salary to fly from Los Angeles to Hong Kong. Today, they would have to work less than a week to do the same trip. According to data from Airlines for America, domestic US airfares (including fees) have reduced by 40% since the 1980s. This decline has not just been in the US, there is little doubt that it is possible for travelers from all corners of the world to identify flights they have made in the past that are now less expensive. Importantly, with cheaper flights has come a greater ability for people to fly, aiding a very real democratisation of flight world-wide.”

And the change in passenger numbers is dramatic, from a total of 35,447 Revenue Passenger Enplanements in 1954, Reported by The Research And Innovative Technology Administration (RITA) of the Bureau of Transport Statistics, USDOT[3], to a total of 743.1 Million Passenger Enplanements on US Airlines in 2013[4]. Even as late as 1980, the number of revenue passenger enplanements reported by RITA was a modest 296,903[3].

The world-wide passenger traffic numbers are reported by Airbus at 2.9 billion in 2012, and estimated to grow to 6.7 billion by 2032[2].

The other significant driver in cabin design from the past to today is safety. In the years since commercial air travel evolved from an experience for a privileged few to the daily transport convenience of a great many, the incidents of deaths associated with air travel accidents have significantly reduced, as a percentage of the total number of passengers flying.

The Flight Safety Foundation, reports the number of fatalities directly tied to commercial aviation per year were at 265 persons in 2013[5]. Even with this year’s tragic events on Malaysia flights, bringing the total number of passenger fatalities to 761. By comparison, the number of fatalities in 1954 were 670, and in 1980 there were 1,298 fatalities. Thanks in large part to the lessons learned from these accidents, and the subsequent regulations to govern the design and fabrication of cabin components, making them more resistant to risks from impact and fires, by 2012 the total number of fatalities was reduced to 475 persons.

But these safety improvements have resulted in great limitations to the components in the cabin, through the limited selection of materials available which can meet the newer stringent standards. These same stringent safety standards also help protect passengers from the most radical design concepts out
there, which would bring passenger capacity on an aircraft to intolerable levels, as we'll cover later in this report.

Devin Liddell, Principle Brand Strategist at Teague, Seattle, gave Skift a very candid response for why passengers believe travel was better when the realities of today’s cabin designs, incorporation of new technologies, and innovations in cabin services, demonstrate dramatic improvements rather than a deterioration.

“What people are really talking about is the anxiety and annoyances common to travel today. The net result of these is the sense of something lost. In some ways, [because of the larger and more diverse passenger mix] airlines have lost the curatorial control of the cabin,” says Liddell. “Airlines are not as willing to step-in, if a passenger removes his shoes on board and places bare feet on the bulkhead, for example. People behave badly in all the cabins, Economy or Business or First, and airlines do not feel that they can intervene to regain control of the cabin environment. When people are nostalgic about the Golden Age of aviation, they are really being nostalgic for the days when only rich people flew.”

If things were better when we didn’t have the riffraff on board, we must remember that a large portion of those of us traveling today are what passengers in the past would have considered the riffraff. While travel was a much more elegant experience in terms of the cache it had in society, for both passengers and crew, that cache came at a price to the rest of the world. During the 70s, 80s, and even the 90s, when flying first began to be affordable (if only feasible for rare life events, or for the highest ranks in business) many may have been extra careful to dress properly for the great event, to fit in better with that elite, and to behave properly in the cabin. Now that flying is not a rare experience, but rather a common one, not the realm of the few, but the convenience of the many. Cabin circumstances have changed, and the cabins have changed to accommodate all these passengers, according to the airline’s brand and target market.

For those in the elite, who used to make up the bulk of passengers in the past, there are unprecedented levels of luxury available. It is what they value and it is what they receive. For those far larger numbers of passengers who seek out a budget option to get from point A to point B, there are many options available and the cabin conditions directly reflect the economy fares paid.

That said, there is much more room for improvement in the cabin (a space where room is extremely limited and every square inch precious). We’ll be looking at those improvements, and the question of space, in the sections that follow.
Are seats getting tighter? No. Not if you believe Airbus, and many others. When Airbus presented its marketing platform to promote an 18-inch standard seat for aircraft, it also pointed out a fact that many lose sight of: in 1950 the standard seat width was actually 17-inches. No different from today’s narrowest seats. In fact, many of today’s narrow seats are closer to 17.5-inches and a great number of economy seats in the market fall between 18-inches and 19-inches.

As Liddell points out, the battle for the inch is no more than a marketing battle. The cause for dissatisfaction, and the feeling of confinement is attributable to other key factors of design in the cabin.

“How many passengers can actually tell the difference whether they are sitting in a 17-inch seat or an 18-inch seat?” Liddell asks, suggesting that passengers really cannot feel a marked improvement in the adding of one or even two inches of extra width. What he describes as “the whole industry’s hand-wringing on this inch standard” doesn’t consider other improvements which could go much further to mitigate passenger discomfort.

Goode suggests something very similar when he tells us: “The pitch and the space hasn’t really changed much.” Though Park points out: “We’re developing new seats so they make more room for passengers. We’ve changed seats so that they are not so bulky. They don’t need loads of cushions of foam anymore to provide equal comfort. [Ergonomic] Mesh is creating comfort. Today, a 3-inch cushion can be reduced to 1-inch, and that gives passengers some extra room to move around.”

Park agrees with these points, and also points out that passengers have changed: “The industry is doing its very best to provide comfort, though greater pitch and wider seats are required. The general trend is that we have larger people than 50 years ago. How do you accommodate the variances in size? Should we pay by weight? It’s a very difficult thing for airlines to decide. Finding an average is a different question. Perhaps seats can be made more flexible.”

Some flexible seat options are on the table, but the likelihood that they’ll be incorporated into
a cabin is still in dispute. It's important to note that while Airbus has proposed variable seat width, the airframe manufacturer has moved away from this concept. Though Ingo Wuggetzer, VP of cabin innovation and design, Airbus, mentioned the concept of incorporating an extra-wide seat, during an interview published this March in Aircraft Interiors International Magazine[7], Airbus expressly stated that it is “not promoting the extra-wide seat at this time,” opting instead to focus on the promotion of an 18-inch standard. The challenge for these concepts is in determining the proportion of passengers who will pay extra for that extra space, and in being able to adjust airline reservation systems accordingly. As Park says: “There are significant pressures from passengers to rationalise the onboard product and meet all body types; to design seats to accommodate the tall, the short, the thin, the wide. Each of these have different needs.”

Liddell addresses the issue of passenger comfort by moving beyond the focus outside of the seat entirely. “Instead of pontificating about a passenger’s right to 18-inches, we should look for the comfort factors passengers value. We’ve done studies which suggest that passengers will choose the availability of in flight connectivity over being able to choose a window or aisle seat. Passengers are concerned with bin space available, the time it takes to board the aircraft, the service onboard, the entertainment options. Seat width as a sole issue is not worth all of the airtime it’s getting.”

Liddell’s colleague at Teague, Jenny Ruegamer, Creative Director for Airline Design, who works on interiors programs every day with a wide-range of airlines, suggest that other features of the cabin in newer aircraft have already addressed the sense of confinement in ways far more significant than added seat width. “One thing we’ve noticed,” she tells us, “on the new Dreamliners the perception by passengers of their seats is that they felt larger. Passengers believed their seats were bigger.”

In fact, they were not. Boeing’s 737 and 787 Dreamliners accommodate seats of 17.2-inches, though new developments in the cross section of the 777X make an 18-inch seat possible—with adequate capacity to satisfy airlines[8]. As Liddell and Ruegamer suggest, this extra inch will make little difference to passengers, but other features of the 777X, adopted from the Dreamliner models and, to some degree, also available on Airbus’ newer aircraft including the competing A350 XWB, are much more likely to make a difference. cavernous cabins with high ceilings, immediately generate a sense of spaciousness; the new-design larger, bins also manage take up less visual space in the cabin, technological advancements which improve cabin lighting help put passengers at ease, help adjust the body clock to reduce jet-lag, and create an overall more restful space; significant improvements in cabin pressure generate conditions similar to flying at a more comfortable lower altitude; enhanced air filtration, higher cabin humidity, and reduced cabin noise combine to enhance passenger comfort. Regardless of pitch or width, all of these make flying far more pleasant.

Beyond all these factors, there are important rules in aviation which will help protect passengers from extremely cramped cabin conditions. We’ll discuss those next.

**The Rules**

No matter how many passengers airlines may want to pack in their aircraft, aircraft capacity has its limits. These limits are stipulated in certification regulations which require proof that any aircraft can be evacuated in 90 seconds in the event of an emergency (FAA 14 CFR part 25, appendix J). Far from being exclusive to the FAA, this regulation forms the basis of all standards for the industry around the world. Even with recent amendments to this CFR, which accommodate modelling of evacuation conditions rather than conducting live evacuation tests in limited conditions[7], the requirements for such modelling are tight. Airframe manufacturers cannot just install unlimited seats on an aircraft because an airline wants them to. Adding new seating capacity to an aircraft is
wholly dependent on proving, among other
dynamic factors, that the evacuation of the
aircraft in 90 seconds is not compromised.

Increasing capacity brings about complica-
tions to the aircraft’s certification which limit
an airframer’s willingness to accommodate
airline requests, except within a very limited
scope of extra seats. For example, Airbus
recently added nine seats on the A320 (from
180 to 189) to accommodate airline demand
and match the competing Boeing 737.

Boeing responded by announcing that it will
offer a 200 passenger capacity 737-8 Max,
because certification of higher density on
this newer model was feasible, met certifi-
cation requirements, and pleased Boeing’s
customers (it also put them ahead of Airbus
again—which was a plus). Airbus stated that
it will add 20 seats to the A320 neo from 189
seats to 240, because this newer aircraft has
the space for it and is easier to certify[10].

But these capacity increases are already
bordering on the upper limits of how many
passenger these aircraft could fit, and are
highly unlikely to be compressed further.

The Realities

As Goode explains, there are limitations in
cabin design, beyond these certification
requirements which also contribute to limit-
ing cabin crowding, and they have important
economic repercussions for aircraft manu-
ufacturers and airlines alike.

“When Boeing and Airbus design
planes, they rate the aircraft for total
passengers,”Goode tells Skift. “They have
weight and passenger number limitations.
It’s a lot more work to meet the certification
requirements. There also more conten-
tious issues such as providing more toilets,
more space for service areas like galleys, to
accommodate more meals. These factors
defeat the objective of increasing passenger
capacity.”

The Physics

Beyond the economic impact of the increase
in non-revenue cabin lay-out requirements,
there is also the issue of weight capacity im-
 pact to the aircraft of adding more seats[11].
Even beyond that, there is the issue of Gs.

Modern aircraft seating is required to meet a
16-G (gravitational force) impact requirement
(Improved Seat Rule 14 CFR 121.311(j) [12].
A predominant factor of this requirement is
meeting very specific Head Injury Criteria (HIC)
which forces seating manufacturers to prove,
through destructive testing, that passengers
cannot be seated in such a way that their heads
could make contact with the seat in front of
them resulting in serious head injuries.

There are a number of work-arounds for HIC.
Some of them depend on cushions on the
back of the seats to protect the head, but as
Goode explains, the industry is moving away
from extra padding. Besides, one of the great
trends in cabin enhancement improvements for
aviation is the incorporation of more In-Flight
Entertainment solutions[13]. The regulations
also have specific requirements for Head Injury
Criteria when embedded In-Flight Entertain-
ment (IFE) is installed on seats.[14] Airlines
have to balance between their desire to add
capacity and their desire to add the in-flight
services customers value most. As Liddell
points out, IFE is one of those features pas-
engers appreciate.

Other factors are the spacing of seats (pitch),
and the dynamic engineering of the seats and
corresponding seat belts so that they prevent
excessive forward movement of the body. These
dynamic engineering enhancements are impor-
tant developments. They allow airlines to place
seats a bit closer than they could in previous years,
while ensuring passenger safety.

To achieve these benefits, the design of seats
have evolved as well—leading to seats, which by
design, use the space optimally and resulting in a
roomier feel for passengers when space-consum-
ing design elements in the seat back are elimina-
ed. No matter what engineering improvements
are made, this Head Injury Criteria will affect the
density limits of the aircraft indefinitely.

The reality is that physics is on the side of pas-
sengers. Beyond evacuation considerations, the dynamics of crash conditions significantly limit the aircraft density that regulators will allow. These HIC are not dependent on crash conditions alone, but also consider the impact of sudden changes in the cabin, such as the shifts caused by severe turbulence. Because turbulence is a far more common concern for cabins than aircraft crashes in today’s aviation, regulators resist airlines and manufacturers pushing the tolerances too far. As with evacuation requirements, for HIC and Dynamic Testing, the FAA standards set the bar for international regulators.

Because of the lessons learned from aircraft accidents in the past, these requirements are not optional or negotiable. Unless expensive testing can prove otherwise, suggesting improvements in manufacturing which can handle these risks more effectively, the rules will remain fixed. Safety overrides any design features or economic benefits in aviation.

Thanks to the immutable force of gravity, space reductions which impact passenger comfort can only be pushed so far. In the aircraft cabin, the force is with you.

The Possibilities

As Park points out, despite these important certification and regulatory limitations, there are great possibilities for improvement to passenger comfort. “The limitations are all part and parcel of being in aviation, but it is possible to stimulate creativity to generate ideas—inspired by the automotive industry, for example.”

The desire to provide passengers with a product which matches their experience on the ground in the air, also puts priority on developing very similar interiors to those in the automotive industry—giving customers a distinctive luxury feel. Automotive is an important point of reference for aviation, because of its similar considerations of crash conditions. Though the regulations vary greatly for the two industries, some of the dynamics (including HIC) are very similar. In fact, the premiere organization for Aerospace seating engineers is SAE—the Society of Automotive Engineers. While the regulations of aviation stand alone, in a class which in many ways is more stringent than automotive, the Technical Standard Orders (TSOs) for fabrication of aircraft seats reference some SAE standards.

“In certain respects, aviation is falling behind automotive,” Park says, “but that is because of the conditions. Safety is paramount.”

And, behind the scenes, engineering innovations are leading to a revolutionary developments in cabin design options which will directly impact passenger comfort. Newer, lighter weight but sturdy materials allow for changes to the
structural design of seats which yield more comfort. New fire-retardant materials also allow for aesthetic elements to make the cabin more visually appealing. Heavy competition during this boom, motivates manufacturers and airlines to push for better products and new leaps in design.

Park tells us: “It’s important to give people confidence, front to back. It’s refreshing to see some of the ideas out there. It would be a sad day if that sort of thing didn’t happen. Improvements to the fuselage, the introduction of new materials, there are many gradual improvements underway. We should be optimistic.”

No Gain in Pain

It is also important not to group all airlines together. Design trends are not universal in the industry. They are driven by the airline’s brand, it’s market niche, it’s target customers.

As Park points out: “The ULCCs [Ultra Low-Cost Carriers] may be more concerned on getting people from point A to B at the lowest cost. But there are Premium possibilities available, especially for long-haul flights.”

As we watch new cabin programs develop, this differentiation becomes more clear. It is directly tied to the brand experience an airline wants to offer customers. Even the most extreme ULCCs, though, make provisions for passenger comfort.

We’ve seen extreme developments this year, like the introduction of the new Etihad A380 Cabins[15], and Etihad’s lavish 777 cabin products.

We’ve seen luxury cabins which may not be as extreme, but still offer considerable comfort. The introduction of Asiana’s new A380 cabin[16] is a good example, as are Lufthansa’s new Interiors[17].

While we awaiting more cabin reveals from Qatar Airways[19], some insights into which

Goode shared with us expressly for this report along with what we know already is impressive; if a very different approach from Etihad.

Some airlines, like Air France, have introduced lovely cabins with great comfort features[20]. Air France has admitted it took these steps because it is under pressure to compete with the higher standards set by luxury carriers and competing flagship carriers[21].

More conservative airlines like Iberia[22], SAS[23] and Finnair[24], have introduced simple yet highly comfortable cabins. In the case of Finnair, the airline has capitalised on the comfort features already incorporated into the A350 XWB to make the travel experience better, even though the airline has adopted many catalogue options in its interiors.

Many might be surprised that, for all its notorious frugality, Spirit Airlines avoided the most uncomfortable and cheapest seating options on their new aircraft; choosing instead to install Acro seats which, while practical and easy to maintain, are also designed for comfort and to maximize the passenger’s available legroom[25].

Other infamous Low-Cost Carriers, like Ryanair, are likely to follow suit as they try to clean up their brash image. Ryanair has already gone on the record saying it intends to introduce new cabins soon, though the airline has yet to provide details[26].
Southwest Airlines has set a standard for Low-Cost Carriers to balancing between economy and comfort which, with each cabin design development, the airline has consistently met.

And let’s not forget the true rebels: the hybrid carriers we’re fond of referring to as Low-Cost LUX. While Virgin America has provided a very comfortable cabin to its passengers, JetBlue has recently taken the lead with its revolutionary Mint service[27].

Far from looking backwards and pining for times lost, aviation looks forward to setting new standards. Economic conditions right now facilitate this dynamic. When the industry has undergone strain, such as after the attacks of 9/11, it has also proven that it can put all plans for improvement on hold, making due with what is already installed until better times come around. As soon the dark times are over, though, the pickup to improve the cabin goes from being a pace to a run, from moderate competition to an arms race.

Why? It’s very simple. There is no gain to airlines from passenger pain. In an increasingly diverse and competitive market, and despite the different approaches airlines take in keeping with their market niche, all airlines want our business. They’ll do whatever it takes to get it. But more on this later, let’s talk class.
The focus point for today’s passengers, which explains the sense of loss since the Golden Age of aviation, is no doubt the Economy cabin. We don’t hear a lot of comments from Business Class passengers saying comfort has gone too far, or from First Class and Luxury passengers saying they’d like to see their suites downgraded. However, as these Premium services take great leaps forward, the gap between the relatively stagnant developments in the Economy cabin become more prominent. Many experts agree that this disparity is what aviation must address as aircraft interior design evolves. Some experts question whether, in today’s and tomorrow’s travel experience, there is even a place for the concept of Class.

As Park mentioned, a cabin divided by class into separate cabins, dates back to the Golden Age of rail travel; it echoes the experience on the Orient Express, with the First Class trains gaining all the attention and becoming the setting for mystery and romance, while the coach class travelled in far more austere conditions with service and comfort at the bare minimum.

This is also true of the vintage travel experience on cruises. The very origins of the term posh comes from this class divide on ships, with First Class passengers enjoying views of Port Out, and Starboard Home in their vast cabins. When the Titanic went down, it took passengers of all classes into the depths. This is a tragic event which is fixed in our memory, not only because of its touching human drama, but also because it is so analogous to the class uprisings around the world at the time. After all, though passengers of all classes died, those traveling in the depths of the ship had little hope of ever getting out. There was a great sense of injustice, felt just as strongly today as in 1912.

These extreme differences between the services offered to the haves and to the have-nots, do nothing more than undermine a sense quality for the brand offering transport, and foment resentment in the largest percentage of customers.

We mention these two other forms of transport because, while rail travel has evolved somewhat to a more modern concept of democratic class services, and cruise lines now offer an enjoyable travel experience to all passengers (no matter the size of their cabins), airlines appear regretfully stuck in the past when it comes to class.

As our experts tell us, aviation is poised to shed this class structure, at long last. We’re going to discuss the various classes of service as they
exist today, where the lines have blurred, and how much further airlines have to go before they match the new, more attractive, more equitable, service standards of rail and cruise travel.

Economy, Democratization, and a Class Uprising

Let’s start at the back of the plane. It’s all happening at the back. The optimization of cabin space, and careful utilization of every square inch of revenue space available is not something airlines are implementing exclusively in Economy Class. New designs of Business Class and First Class seating have ensured that airlines can optimize the cabin space equally, in all classes of service. We’re not claiming that pitch is identical—it’s not—rather airlines have found ways to fit more Business Class Seats, and make the most of the First Class space available, by incorporating newer front-to-back and nested seat structures.

At the back, the sense of a cramped cabin is largely due to what Goode describes as a “sea of seats.” Endless uniformly aligned rows upon rows of seats, starting at the divide of Business Class or Premium Economy Class cabins (where available), and reaching all the way to the back of the plane, with little or nothing to break up the space, immediately emphasize the number of passengers fitted into the cabin, generating the concept of cattle class, and the stigma of being one of many tinned sardines.

Park, Goode, Liddell and Rueagamer all view this approach as antiquated, out of step with modern society and not in keeping with the potential for cabin design which new aircraft interiors components and new aircraft afford to airlines. Thinking in terms of class, ignores service opportunities and product enhancements which add value to the travel experience for the majority of passengers—one of which have little or nothing to do with the cabin structures themselves.

“The hang-up on how to increase capacity is important from the commercial aspect for airlines,” Goode says, “but you get to the limits of that quickly. Keeping seats, service, interiors features, entertainment, all at the same level is limiting.” Goode suggest that it’s about how you break up the physical space, and package the service offerings, to create special sections of like-minded passengers, who value similar service and product features are seated together, in tailored sub-divisions of an Economy offering. Structurally, Goode suggests using sidewalls, bulkheads, bins and galleys to break up the visual and physical space of the cabin, eliminating those “seas of seats” without compromising total aircraft capacity. He suggests that airlines should “offer more intimate spaces, make the cabin more flexible to the needs of passengers, with a family zone, a sleep zone, etc.; airlines should tailor the experience to the passenger group.”

Tomorrow’s travel experience, most experts agree, should be based on fitting cabins to suit the needs of various passenger demographics, with feature and service sections instead of class sections; though—as we’ll soon cover—a class divide is still an important selling point in certain markets.

In a recent article on Aircraft Interiors International Magazine, brand experts like Peter Knapp, Global Creative Officer at Landor Associates, and Christopher Nurko, Global Chairman at FutureBrand, who will also be a guest speaker at Skift’s Future of Travel Global Forum, put their support behind the concept of designing for passenger types and passenger preferences, not only as a passenger experience enhancement, but also as a significant competitive advantage to airlines.[28]

While a lot of attention is paid to the undoubtedly growing and influential Millennial travel demographic, Knapp points to the growing importance of the Silver Flyer demographic which, while having greater financial resources available and a strong desire to travel, is often overlooked—despite the very specific, structure-dependent, needs of this passenger
Nurko points out that the needs of Millennials in the cabin are easily met, since the priorities for these passengers are primarily focused on the availability of desired services overriding (sometimes eliminating) the importance of comfort features. At the same time, Nurko points to another rarely recognized and growing demographic: the Gen-TREP passenger (for GENERation EntREPreneur). This passenger is not likely to travel Business Class. She’ll be focused on growing her business, and tracking her travel spending carefully. But she will value a quiet, productive space to work. She will also value In-Flight Connectivity, and other “soft” features of the cabin, such as tailored healthy menus.

Skift has already identified the growing importance of Female Business Travelers[29], and pointed out that aviation needs to join other aspects of the travel experience in meeting the special needs of these increasingly influential women. The numbers we presented in this report are important for travel brands (including airlines) to make special note of. Here’s a quick excerpt of the figures presented in Skift’s special report:

“Female Business Travelers are poised to make up a significant share of the Business Travel Market. They already control 60% of the wealth in the U.S. and influence 85% of all purchasing decisions. Women are high-tech, mobile, connected, and social. They like to book on the move and represent 58% of online sales.”

Airlines which ignore the developing trends in various passenger demographics, do so at their own peril. Not only do they reinforce the negative image of the industry with the majority of the passenger public, but they also lose out on the revenue opportunities a more flexible cabin philosophy would yield.

Goode suggests that cabins should be “more flexible, according to the likes of passengers,” and he also cautions that now is a good time for the industry to adopt these changes, while economic conditions permit creative solutions. Of course, the majority of airlines introducing new cabins are already committed to traditional class-divides. This is problematic, and a lost opportunity in light of developing trends, but one piece of good news is that airlines are also shortening the life-cycles of their interiors programs making changes sooner than they did before[30]. Airlines which missed the coming trend for this cycle, have an opportunity to revamp their approach for the next cycle in three to five years’ time, and, because many of the changes which Goode and others suggest are not as structurally dependent as other cabin renovations, many can be implemented in phases—as part of a “soft products” update.

Of all the experts we spoke to, Liddell was the most emphatic about the importance to do away with class entirely—again with the exception of select markets we’ll discuss separately. In Liddell’s view, however, it’s not about separating passengers by class or separating them by demographics. The winning approach is to find common values, to identify the most important features to passengers when they fly and to ensure they have them. As Liddell tells us, the key is to “eliminate the anxieties and annoyances” associated with air travel, while designing for the extremes.

There’s a revolution building in the air. The media coverage customer complaints garner, magnifies the rumblings of the majority of passengers crying out for something unexpected, something different. Airlines which capitalize on the opportunities designers and manufacturers are ready to offer to meet these needs, will see big gains in passenger satisfaction and the building of genuine passenger loyalty.
Is Premium Such A Prize for Airlines?

When many think of improved conditions for the Economy cabin, they immediately refer to the availability of a Premium Economy product. In fact, Premium Economy is not one product but two distinct products, each of which works according to the airline model to which it is applied and to the cabin configuration in which it is used.

“There are two different approaches to Premium Economy seating,” Goode tells us, “and that is important to note. European airlines offer a different seat entirely; whereas, in America, Economy Plus is more likely to be the same seat with more space—it’s not so much of a difference in products, but in space and services.”

The innovation of Premium Economy seating is the beginning of the blurring of the definitions of Premium offerings in the cabin. It is the first section of the cabin where a differentiation is made that is highly dependent on the airline’s marketing strategy, and not based on a uniform product definition in the industry. As we’ll discuss next, this blurring is most pronounced between Business Class and First Class on the majority of today’s carriers, but it all starts with Premium Economy.

How we got Premium Economy in the first place, and why we might lose it

This new Premium Economy class of service was first introduced by Virgin Atlantic in 1992, and was a revolutionary new way (for the time) of labelling cabin products to generate a three-class structure.[1]

To understand what Virgin Atlantic accomplished, and why it was so remarkable, we must first step back to the Economy section. The seat structures on Virgin Atlantic’s aircraft in Economy were similar to those available on Virgin Atlantic’s competitors. The Virgin Atlantic difference in Economy was entirely related to service and to “soft features,” like giving Economy passengers a fun keepsake amenity kit, and incorporating vibrant fabrics, and appealing design details. Virgin knew it wanted to define a strong brand, and considered every element of the cabin and the cabin experience holistically—to powerful effect.

We must also mention Virgin Atlantic’s excellent standards for cabin service and hospitality throughout the aircraft. As Park points out, hospitality and a high standard of service were some of the better aspects of the Golden Age. But, aside from these pleasant touches, Economy Class at Virgin Atlantic was very similar to Economy Class on other carriers. Yet, the airline became very popular and very successful. Passengers felt much more comfortable on a Virgin Atlantic flight. Virgin Atlantic is an exceptional case-study of how effective holistic branding can change passenger perspective in the Economy cabin, even when structural conditions are not significantly differentiated.

Because, originally, Virgin Atlantic flew a two-class cabin divided between Economy Class and Upper Class, also an industry first, the introduction of a third class got a lot of attention from passengers and the industry alike. Instead of incorporating a more traditional Business Class cabin, with contemporary features of Business Class at the time (which were far more modest than today, but still far better than an Economy Class product of the day), Virgin Atlantic thought out of the box again, appealing to aspirational Economy passengers to move forward, for a relatively affordable price differential. Though seats were improved, they were still similar enough to Economy seats that the Upper Class cabin and its own host of unique service features were still more attractive to those who could afford it. The majority of the features in Premium Economy attractive to passengers at the time, were not dependent on structural features alone. Look at the list of features listed on the Virgin Atlantic sales brochure of the time, as referenced by Jennifer Coutts-Clay in Jetliner Cabins[1]:

- The separate cabin
- Seats were longer and wider than its regular Economy Class seats—the pitch on the
Boeing 747-400 was 38 inches (96.52 centimetres)
• Increased knee room, leg-room and headrest comfort;
• A complimentary pre-flight glass of champagne
• A personal TV screen, with a minimum of six channels showing at least eight movies; Nintendo and PC games; the Sky Map aircraft tracker; the in-flight magazine Hot Air and a selection of newspapers
• A choice of three meals, including a vegetarian option
• Fresh fruit available throughout the flight

Some readers might point out that a separate cabin, more leg-room, and the incorporation of In Flight Entertainment equipment are, technically, structural features. They might be, but as Goode has pointed out, a separate cabin is not dependent on a large structure to provide the break. It can be accomplished even by breaking up the appearance of the trim and finish (textiles and styling), so that the cabin appears separate without so much as adding a bulkhead—though perhaps a curtain can be fitted in the aisle. More room can also be offered while keeping the Economy seat a constant, as it can simply consist of a variable pitch. And, in today’s high-tech skies, embedded IFE are far from a feature exclusive to Premium cabins. It can even be offered by capitalising on passenger’s devices. The other features which made Premium Economy Class such a special experience are all “soft” cabin elements; including, what is not listed in this list but was a very nice piece of kit—the better Premium Economy amenity kit.

What Virgin Atlantic did was special, profitable, and enduring, because of the customers it targeted. It worked on a very human factor: that all of us, regardless of class, have a little elitism in our veins. We all want to be a bit better off than our peers. We all want special treatment, and are willing to pay for as much special treatment as our wallets can afford. It’s the same reason why frequent flyer programs have been so successful. The competitive nature of reaching that Gold, Platinum, Titanium or Paladium or whatever other “um” brands give us as the next better step, is addictive. Because, to achieve this status, one has to do very little beyond spending what we would spend anyway (occasionally springing for a bit more) to chase a better status, it is easy to justify. We are not being spendthrifts, the rationale goes, if anything we are being financially savvy—working the odds in our favor, getting something for nothing.

This psychology and this product positioning is essential to the success of a Premium Economy cabin offering. It must fit in a Goldilocks zone. It must be affordable enough for Economy passengers with a little extra change in their wallets to spring for the upgrade, while not being so comfortable a product offering that it competes with the airline’s Business Class. As Liddell says: “Airlines have to be careful that Economy passengers are buying up, not Business passengers buying down.”

Getting that balance right, especially with other evolutions in Premium cabins we’ll discuss in those sections, is not always easy. It is the predominant factor which puts the whole concept of Premium Economy at peril with some carriers. It just doesn’t work for their brand strategy, it doesn’t help their goal of selling Business Class seats.
However, Goode has an important point to make for airlines who are on the fence about continuing a Premium Economy class service. “If airlines are operating Premium Economy well,” he tells Skift, “it is the most profitable class in the cabin.” We’ll look at how that could be next.

**How the definition of Premium Economy is evolving to make Cents**

We intentionally use the play on words here with cents, as Goode has pointed out, there are lots of pennies to be made in Premium Economy—enough to add up to quite a lot of dollars. Premium Economy can contribute significantly to the airline’s profit margin, Goode suggests, for sound economic principles. “The price differential between Economy and Premium Economy makes it attractive and requires, by comparison a lower investment,” Goode says. “With certain leisure travelers, it’s a popular option. Older generations will find having a little bit more space worth it, and may choose Premium Economy seats.”

The other important reason to use “cents” when referring to this product is that investment in the product needs to be moderate to be effective and profitable. It should attract passengers conscious of their pennies, but with enough spare change to pay the next higher fare. The next higher fare must be considerably lower than the Business Class and First Class fare. Goode tells us that airlines who get it right want to keep Premium Economy. “The airlines we work with are quite pleased with Premium Economy, once they have been on board for a while,” Goode tells us. “They find it makes a difference.”

A great example of a sustainable model for a profitable Premium Economy cabin, which follows these principles, is British Airways’ response to Virgin Atlantic’s innovation with the introduction of its World Traveler Plus flight product. As Coutts-Clay explains[1]:

>“British Airways (a traditional three-class carrier) subsequently introduced World Traveler Plus, which created, in effect, a fourth class of service, with all four classes traveling on board the same aircraft. This special seating area, for up to 40 passengers, was located between Business Class and Economy Class, and the configuration had a pitch of 38 inches (96.52 centimeters). The fare was 20 percent higher than the normal Economy Class fare. In addition to the extra seat width and leg room, at each position there were headrests and footrests, a power-supply outlet for laptops, and a telephone. These passengers had a double cabin baggage allowance. In 2001, British Airways reported that this product accounted for a third of all the airline’s business.”

Let’s flash-forward for a minute and look at what British Airways has done with its short-haul fleet this year[31]. Having seen the benefit over the years of an attainable class upgrade, an affordable improvement in comfort and service, British Airways was careful to equip its new slim-line seating A320s with a two class cabin, which could be described as an Economy and Economy Plus option (though the second class is specifically targeted at Business passengers).

British Airways is not alone in this. In fact many European carriers now offer an Economy Plus product for their short-haul passengers, but with few EU carriers is the distinction as appealing. While some Premium Economy products in these EU carriers consist of doing no more than dividing the “sea of seats” with a distinct antimacassar or even something as small as a card on the last row of seats telling passengers sitting forward of the card that they are in a better place, the product is nearly indistinguishable. The price differential is often not justified for what can be on some carriers
an identical seat with a little more room and a meal included. The most successful of these products involve an empty middle-seat, some of which are so narrow that no one could fit in them, but which result in an odd and inefficient use of the cabin space available. Other than serving as a place for passengers on either side to argue over whose coat or briefcase gets to sit on that mini-empty seat for a while, it provides no added value.

By comparison, British Airways has comfortably outfitted their aircraft with B/E Aerospace slimline seats, which keep the seat pitch between 29-inches and 30-inches in the Euro Traveler (economy) cabin; while offering features passengers will care about such as a seatback tablet holder, a four-way moveable headrest, and an unobtrusive retractable tray table. At the same time, British Airways has kept its premium product on these short-haul flights by incorporating its Club Europe (Premium Economy or Business according to a blurring definition), which offers a new ‘central console’ table in what would be that awkward middle seat space. It gives passengers somewhere to place their drinks and snacks while using their tray table to work. There is still room for a rethink on these products, finding a better application for that middle seat or eliminating it entirely, but it’s progress.

What is important to note in British Airways’ approach to all these cabin divisions, is that the airline over the years has moved away from the problematic use of the world “class” entirely. It groups Economy into UK Domestic, Euro Traveler, and World Traveler. Premium Economy continues to be called World Traveler Plus. The Business product is labelled as Club Europe, Club World, or Club World London City (for that profitable London-New York city pair). And First is First. Plain and simple. These may seem like nuances, and they are, but important ones. Having walked away from attaching the word “class” to each cabin section British Airways leaves itself room to redefine what those cabin sections mean and how they appeal to target customers. It’s the beginning of a more profound blurring of the divides, something we’ve already mentioned is part of the new reality for aviation and will become a dominant trend in tomorrow’s air travel.

Some industry insiders (even those who recognize what a success Premium Economy has been) suggest that we’re coming to a period where blurring lines between the sections of cabin, and the elimination of the concept of class, mean that Premium Economy too will be repurposed and reorganised. Liddell suggests that developing feature-based sections and product bundling by desired features is far more important, and he’s not alone.

As most revolutions do, this disruption of the concept of class in the air, scales up to the front of the plane. This results in changes to Business Class and First Class products which make the two nearly indistinguishable. We’ll now leave cents behind, to discuss the big bucks involved in classifying and packaging those two no-longer-so-different Premium products.
The bell tolls announcing the imminent death of the First Class cabin have been ringing long enough to give us tinnitus. It has been the source of much debate in the industry for decades. In many ways, those who argue that First Class is (or will soon be) dead are right. In certain markets, First Class has been replaced by Business Class. In others, First Class has reached unprecedented levels of luxury. More importantly, the two classes have intermingled become entangled and been repackaged, rebranded, and, well, reclassified.

It only takes a quick peek at cabins past to note that what was First Class twenty years ago, couldn’t pass for Business Class today. Business Class today, also comes so close to First Class that, in the cabin designs of some airlines, it’s virtually indistinguishable.

Why would these airlines bother to include a First Class when the product itself is so close to the product offering in the Business Class section? Why would passengers purchase a First Class ticket when what they get for their money is so very close to what they would have gotten in Business Class, for a lower fare?

“Airlines’ main revenue comes from Business Class passengers. This has led to airlines providing those customers better products in Business, sometimes better than other First Class products,” says Goode. “There’s been a blurring between these two classes. They are different for different airlines because, to offer First Class, those who offer very comfortable Business Class have to do even more, and sometimes the use of space on the aircraft doesn’t allow for this. Airlines respond to this challenge by providing two-class cabins on many routes, and three class cabins only on select routes. The 777 and A380 have made including an enhanced First Class more possible. Even so, some are opting for a Business and Economy Class configurations, where the Business Class will be a very fine service. All that said, First Class is difficult for airlines to drop, even if it is not profitable. For many Flagship Carriers, it is part of their image, especially for long-haul routes. Their passengers may expect to have a First Class product available.”

Liddell points to a different reason for the blurring of the lines between First Class and Business Class: the expense report.
“Following the recession, there was increased scrutiny on high-end service,” Liddell says. No one wanted to explain why they were paying for a First Class ticket, when people in the company were being laid-off. Enter the upscaled Business Class product. It’s just as good or better than the First Class products of the past, but it looks nicer on the books.

“The success of the Business Class cabin is so pronounced, that airlines are encouraged to continue to add to it,” Ruegamer tells us. “It becomes harder and harder to distinguish between them.”

But some travelers don’t have an accounting department or a board to answer to. Certain individuals want to stand out from the crowd in the cabin, especially on long-haul routes.

“Some cultures need First Class,” Liddell explains. “They need to see themselves at a different level—more exclusive. Business Class is just not enough.”

Rows, by any other name, may still be First Class. The marketing label applied to the cabin product, on many of today’s aircraft, becomes just that: a matter of marketing strategy. While in some parts of the world the approach has been to disguise First Class as Business Class, making it more palatable (with great success and increasing demand), others do better by going over the top—catering to the needs of those for whom nothing less than First printed on the ticket will do.

We’ll look at the some of the most interesting developments in catering to these as we move forward in the cabin. It’s time for an upgrade.
Like the blurred First Class/Business Class cabin products, Hotels in the Sky are manifold and varied. The hospitality term is tossed around liberally today from a host of airlines offering very different services. British Airways[32] has laid claim to it, as well as its Oneworld partner American Airlines[33]. Even conservative carriers from more egalitarian cultures, like SAS[34] have made adopted the hotel in the sky description to explain their premium product strategy.

It’s a catchy phrase for the marketing department to use to set the airline apart from the crowd. Just as there are many types of hotels on the ground, there are many types of hotels in the sky.

The hotel in the sky concept also brings back the idea of hospitality in the sky which, as Park points out, was such an attractive feature of vintage aviation. In this way, it is a boon to aviation; though, without addressing the necessary class disruptions at the back of the plane, airlines are unlikely to resolve their negative image, regardless of premium product. If anything, leaving the cabin at the back untouched, while continuing to offer hospitality at the front may lose the airline goodwill with the bulk of its passengers.

There are also proper Hotels in the Sky, entire Suites and Apartments, which appeal to the elite few who value status and separation from other passengers in the cabin. We’ll examine those in detail next, as we look at the skies of the privileged few.

Whether branded as Hilton or the Four Seasons or beyond that into private residences, our experts are confident that Hotels in the Sky (as a branding and marketing concept) are here to stay.

“It is not a passing fad,” Goode tells us. “Airlines will continue to offer passengers more and more comfort features.”
The Skies of the Privileged Few

Woe is to the 99%, but the 1% are flying high. Aviation has never seen luxury on the levels offered today. Designers and airlines of the Golden Age, for all their reputation of luxury, would have found today’s luxury developments impossible. They might even have seen them as ludicrous and wasteful. After all, the aircraft of the time had no space for such expanse. Yes, there were airlines offering sleeping berths on planes. TWA was one example, as was National, Pan American, KLM and BOAC. Boeing’s Stratocruiser provided room for bunk beds, and even allowed space, in what would been today’s luggage bins, for convertible sleeping compartments. United included convertible seats which could turn into double beds. There were lounges on board the aircraft in Vintage Class too—but nothing compared to today.

Tell the truth, these dream-zones of old were the stuff of nightmares. Knowing what we know today about the risks to passengers from turbulence and crash conditions, it is impossible to imagine that anyone ever approved these designs. They were based on emulating the experience of long-distance travel by train, in the most luxurious train cabins. It was a way for airlines to introduce a familiar experience, which put passengers far more at ease with doing something which, at the time, did not seem like a very good idea: flying.

These were times when rail travel was very convenient to all, while air travel was frightening to many of the few who might be able to afford it. There is just no parallel between yesterday’s most luxurious offerings, even when compared to today’s lower-tier luxuries. Everything airlines provide the 1% today represents higher levels of comfort and convenience, while ensuring the highest degree of safety and security onboard.

Need we also mention that yesterday’s flights were at lower altitudes, taking far longer to get from point-to-point, with complex connections? None of those vintage aircraft could sustain a 14-hour flight over land and sea, transporting passengers to continents around the world overnight.

Add to this, that the 1% today are wealthier than the 1% of those years, with higher expectations and service demands. Airlines are no longer competing with trains for these passengers. As Park points out: “Airlines are also competing with the emergence of private jets with higher standards of design.
and comfort—that is the future.”

The Etihad Residence

When we look at the Etihad Residence, and scratch our heads wondering just who will buy that one spot on the A380, the answer lies there: passengers who don’t want to be bothered with owning and maintaining a jet, and who want to take longer journeys which private jets (owned or leased or chartered) weren’t designed to fly. Etihad makes this point clear:

“A truly unique and bespoke travel experience, delivered with complete discretion and limitless hospitality...Designed for up to two guests traveling together, it has been created by leading interior designers and hospitality experts who understand the discernment and sophistication expected by the private traveler. The Residence is a haven of tranquility, reflecting an exclusive lifestyle that offers the ultimate in high-end luxury.”

Those passengers are out there, and Etihad only has to find one for each flight. The Residence is rumored to run over $20,000 one way[35], while Bloomberg references a fare of “$43,000 for some flights”[35], possibly Bloomberg is considering a round-trip fare. We know it will be a lot of money, though it is competitive with the costs of chartering a private jet—which does not offer the same levels of service as the Etihad Residence. Though charter costs vary greatly based on single use or membership packages, and are often quoted on request, we were able to find a pricing guide from London to Dubai of a business jet for $59,865[36]. The Etihad Residence will fly between Abu Dhabi and London, but Dubai is close enough to give us an idea of the price differential. The Residence also accommodates two passengers, which makes it even more of a value for couples traveling together. When you consider the abundance of luxuries and comforts offered by Etihad[37], in far less cramped and claustrophobic conditions, with the much higher standards of safety the A380 can offer passengers, The Residence is a steal.

There has also been a very interesting and compelling argument by Brett Snyder, the Cranky Flier, that The Residence represents a clever use of lost non-revenue space on the A380[39]. In an industry where maximizing the revenue potential of every square inch of a fixed space is key to success, it could be said that—far from doing something brash to get marketing attention—Etihad has found a way to mint gold with this one. Of course, if the only objective for Etihad introducing this new product was to get media attention, the airline has had a massive return on its investment, long before ever flying the product.

But let’s step away from The Residence. There’s only one of it on board, anyway. There is a whole other luxury cabin to look at on the Etihad A380 and the Etihad 777; and there are similar cabin products on leading luxury carriers. The First Class Suite is where it’s all really happening for the majority of luxury travelers. These Suites cannot, for now, be confused for Business Class. They are a clearly differentiated product. The primary reason for the success of the Suite is the absolute privacy a Suite affords those passengers who are willing to pay for it. And that includes a good number of that 1%, the 2% and even the 3%.

Those Sweet Suites

While few passengers would say that they would not want to sit in a private suite on a long haul flight, their every whim catered to (and those who have flown in these suites are spoiled for any other section of the cabin), not very many people will reach into their wallets to pull out the $14,000-$18,000 round trip to sit in these posh spaces. Though, that is not entirely true. In some markets, there are plenty of passengers happy to pay that fare. That is
why this product is ideally suited to certain regions and would be a massive failure in others.

“Airlines offering these lavish services are primarily in the Middle East and Asia,” Goode explains. “Economic factors in these regions make this service quite important. The demographics of their passengers come into play. The affluent passengers want this service option. There is competition in those regions to attract these affluent passengers. Take for example, Emirates’ flagship products.”

Air France has taken the bold step of incorporating the Suite concept in its La Première cabin, for a European carrier it is a very luxurious offering. Though providing privacy through a curtain rather than a sliding door (as most modern Suites do) harkens to vintage aviation and does not provide a similar sense of being cocooned, it is more than fine enough. As we’ve previously shared when covering the debut of this cabin, this product is likely aimed at connecting those same Middle Eastern and Asian passengers who are accustomed to a higher standard[20]. But there is another reason for Air France to have taken this step: their new Business Class product is just too good to be true[21]. The airline set a high bar for quality in this Business Class service, and as Goode points out, “those who offer a very comfortable Business Class have to do even more.”
Tomorrow is going to look a lot like yesterday, but better

To the degree that a cabin continues to be no more than a comfortable illusion artfully created within a volatile high-speed cylinder flying high above the clouds, the laws of physics and the laws governing airline safety will continue to limit just how far airlines can go with their greatest ambitions.

Tomorrow’s airline will still consist of a confined space, with seating complemented by niceties. But, Oh! How nice those niceties could be. By opening up the possibilities of the cabin for further innovation, thinking of the product in an entirely different way, leaving behind a past sectioned by two or three or even four carefully structured cabins, airlines have an opportunity to completely reinvent themselves, redefine air travel, and win back the hearts of customers at all budget levels.

We hope that, by presenting this report starting at the back, we’ve not-so-subtly pointed out that this is where the greatest focus for the industry needs to be next. We’ve all seen plenty of Premium activity so far this year, and there is plenty of reason to believe we’ll see even more. Given the restrictions of aviation, there really is only so far you can take the front from here. We’re waiting for something really exciting—the revolutionary developments possible for those sitting on the other side of the gilded curtain.

Liddell would like to see airlines take advantage of the opportunities cross-branding presents. He points to opportunities for cross-branding between hotels and airlines. “Partnerships in co-branding design,” Liddell tells us, “link the seams within the travel experience.” By extending the alliance concept beyond airlines and to ground-based brands, capitalizing on relationships already built through loyalty programs, then bringing cross-branding into the cabin, airlines put themselves at an advantage while providing their customers a familiar and reliable family of products throughout the journey. And that is the future. “A holistic branded journey,” Liddell says, “will see the seams wrapped up in twenty years time.” Liddell suggests that this will fix design and brand in the memory of passengers. With service enhancements, possible only through
By suggesting that airlines design for the extremes, Liddell also sees possibilities in co-branding. “In general,” he tells us, “there’s not enough emphasis on service and product distinction.” An opportunity to provide great distinction is to effectively apply brand collaboration. Yes, there could be Louis Vuitton First Class suites. There could also be Millennial-focused rows at the back offering free connectivity and music streaming, courtesy of Apple. There could be Happy Meals in the Family cabin for the kiddies. Starbucks could offer everything from Lattes to Teavana, from scones to healthy sandwich options, to those Gen-TREP passengers in a dedicated Connected cabin. Beautyrest could sponsor special bedding and more comfortable seat cushions for a Rest Zone cabin, where frequent flyers can work without noise disruptions and sleep—uninterrupted. These are only a few of the myriad possibilities for airlines and brands to explore. The industry is at a critical point to begin this dialogue and make these brand alliances. Doing so will keep it relevant and refreshing for a long time to come.

One thing is certain, the flying experience as a whole, as supported by trends at the world’s Airport Terminals, is changing and will continue to change. The changes may surprise us—and they ought to. Aviation as we know, thanks to its democratization, has lost its novelty. To bring that novelty back and make a profit, airlines will need to think beyond the seat.
Insights and strategies

- **A greater focus on enhancing the overall cabin experience**, taking into account all factors which affect passenger comfort, far beyond issues of seat space and pitch, will make the cabin a significantly more pleasant space in the very near term. Aircraft designed with these important features in mind are already entering service, and will begin to replace older models which currently dominate the fleets of major carriers around the world. As these aircraft substitutions take place, passengers protections of the comfort of travel will also change dramatically. As Liddell predicts: “The nostalgia will go away. We see a future where passengers will instead say: How did we ever tolerate flying like that before?”

- **The cabin crunch can only go so far.** Airlines want to maximize their load factors and reduce their operating costs by adding more seats in the cabins, but regulatory and certification factors will continue to limit cabin density. Despite the revenue benefits of dense seating configurations, many of the costs associated with putting more seats in planes make exceeding the limits of aircraft too costly. Airlines are currently involved in a heated competition to best each other in cabin developments, and for however long economic conditions in aviation permit, this dynamic will ultimately result in better cabin conditions for passengers in all sections of the cabin. The focus for aviation now, is to continue developing the engineering capabilities and innovations which make lower-cost, more efficient, more comfortable and more attractive cabins possible. It’s a tall order, but one designers and manufacturers are eager to fill.

- **Class warfare is rapidly escalating from rumble to a revolution in aviation.** Airlines will need to rethink how they package the products they offer to the larger number of their passengers sitting in the Economy cabin. Breaking passengers into groups by class is not only antiquated, but it is highly detrimental to the future of the brand. It’s out of step with society today, already anachronistic, and tomorrow knowing how to adjust to the needs of these overwhelming numbers of passengers will make all the difference between a successful airline and an airline we remember through vintage pictures—though with none of the associated romance and longing we have for airlines of the past today. Tomorrow, when passengers look at today’s travel conditions, they will be saying: “I can’t believe we ever had to travel that way.”
• **Premium Class must be managed properly to be profitable**, but when it is the profits can be significant. The most important benefits from this relatively new cabin class, though, is the introduction of the idea that Economy passengers will gladly pay a little more to get features they value. Airlines who have avoided a Premium Economy offering, are focusing on driving sales to their Business Class product, but by doing so they may be missing a trick. They are not offering the vast portion of their customers a product tailored to their needs, and the variance in Economy fares between those who buy ahead, or buy on special offers, and the passengers who, by necessity, have to pay higher fares to travel when they need to, also helps build consumer resentment. The solution may not necessarily be to add a Premium Economy cabin today. It was a revolution in the 90s, but we’re nearing the 20s. For airlines, who have to plan their cabins far in advance, this is practically tomorrow. It’s a good time for a re-think, to consider the suggestions from the experts that products should be bundled by service and feature preferences, by particular passenger types and particular passenger needs. If a new cabin product is to be introduced, airlines would be wise to heed this advice. This would put them in the position of leading the change, setting the standard, driving the disruption, rather than riding on the tail-winds of forward-thinking competitors. Airlines are intrinsically risk averse. Getting buy-in on these yet unproven concepts throughout the organization may be difficult, but there is no reward without risk; and there is no improvement without the willingness to change.

• **The Class divide between Business and First is now blurred beyond recognition**, and that’s just how airlines and many travelers want it. After the global economic crisis, many of the executives who were automatically seated in first by corporate policy, could not justify that booking any longer. Airlines have responded by upgrading the Business Class service, and increasing the square footage allotted to this class in the cabin, sometimes phasing First Class out entirely. As a result of this upscaled Business Class product, the design and product definitions assigned to the two Class labels have become vague. The success of this new upscale Business Class (First) proves that there is demand for a premium product onboard, no matter what you call it. With the exception of budget carriers, airlines can’t get away with lowering the standards at the front, at risk of losing their appeal. As we consider the cabin revolution, it is important, and profitable, for carriers to continue a differentiated service for those willing to pay much more. There are even those who want above an beyond this middling premium, and the industry is responding in some very interesting ways to cater to them. For however long the industry remains financially stable, we expect this trend to continue.
• **Today’s luxury cabins may be enough for now and forever.** Really. They’re very nice, and we’ve all been impressed with the possibilities these cabins offer, especially as the certification accomplishments of these cabins trickle down to make innovations in other areas of the cabin possible[41]. But, focusing on the front while ignoring all there is to do at the back, would be a bad move on the part of airlines across the board. The majority of travelers traveling tomorrow will want a variety of Economy options, suited to their needs. As Low-Cost Carriers get wise to the fact that they have to upscale their services to compete for those marginalized customers, traditional carriers could see more of their customer base heading straight for the re-imagined budget aisle.

• **Airlines have a lot to gain by capitalizing on the revenue and cost-offset opportunities of cross-branding.** Creating a branded flying experience will allow airlines to connect with their customers, providing a personalized flying experience, expressly tailored to their needs and reflecting their lifestyle choices. Beyond the benefits to the bottom line of sharing the costs of the cabin, the ultimate return on investment is there: in the brand currency the airline’s ground-based partners would bring onboard. In today’s world credibility is increasingly based on associations, links, likes and common interests. Leaping forward to tomorrow, there is every expectation that these connections will become increasingly important, affecting how consumers think and feel about brands. A physical realization of all those connections, seeded in our collective consciousness by the social media revolution, is a golden opportunity—just waiting for brands to grasp its significance and its scope. There is the new Golden Age of aviation to be found.
Endnotes

[10] Airbus Continues to Walk a Wide Line on Seating, and Boeing Takes the Fast Road to the Front, Flight Chic, July 13, 2014
[17] Air France Enters the First-Class Aviation Arms Race, Skift, May 7, 2014
[18] Air France Rolls Out Redesigned Cabins to Keep Pace With Competition, Skift, June 26, 2014
[19] Iberia Thinks It Has the Solution to the Seamless Passenger Experience, Skift, June 27, 2014
[21] Acro’s Ultralight Seats With New Tablet Table Could Hold and Charge Your Tablet Devices, Flight Chic, April 6, 2014

Further Reading

Aircraft Interiors International Magazine: www.aircraftinteriorsinternational.com
New Trends Report: The Rapid Ascent of In-Flight Entertainment, Skift
Skift.com for regular updates on the latest cabin design developments, with insights from leading industry insiders.
About Skift

Skift is a business information company focused on travel intelligence and offers news, data, and services to professionals in travel and professional travelers, to help them make smart decisions about travel.

Founded in 2012 by media entrepreneur Rafat Ali, Skift is based in New York City and backed by Lerer Ventures, Advancit Capital and other marquee media-tech investors.

Connect with Skift

For any comments or questions, email us: trends@skift.com.

- Skift.com
- twitter.com/skift
- facebook.com/Skiftnews
- linkedin.com/company/skift