Passenger Experience Survey 2024

A clear view of the in-flight future





Don Buchman Vice President & General Manager, Commercial Aviation, Viasat

Are you meeting the latest passenger expectations?

It's a tough question isn't it? Anyone in aviation will tell you that passengers' in-flight connectivity expectations have soared to serious heights. They're frustrated if they can't do in the air what they usually do on the ground. And simply being connected is no longer enough. These days, everyone expects super-fast, super-reliable Wi-Fi.

Seamless connectivity has become key to the perceived quality of the in-flight experience, and a driver of airline loyalty and NPS success.

How airlines respond to these expectations is commercially vital. Unfortunately, their response is made harder by the speed of technological change. As standards rise and the way passengers enjoy air travel evolves, the goalposts keep moving.

The detail that makes the difference

In 2024, we've reached the point where excellent Wi-Fi is no longer an onboard bonus, but a basic expectation. One that often makes the difference between booking a seat on airline A or B. It's not hard to understand. At the end of the day, we're all passengers. Wouldn't you like to be sure that you can work unhindered online – texting and emailing like normal – for the duration of your flight? Or keep connected to your own streaming accounts so you can finish that latest series? Of course you would. It's a no-brainer. As passengers ourselves we inherently know the basics of what customers want, but we can't always know the finer points: 'the detail that makes the difference'. This is where our research takes off.

Anticipating passenger priorities

As the passenger experience is transformed, new expectations are revealed and it's the industry's responsibility not just to keep up, but to stay ahead of these trends. By actively anticipating evolving consumer priorities – such as cost and quality of connectivity, personalization of key services and enhanced overall inflight experience – airlines can innovate at pace to provide solutions that directly address passengers' developing needs.

Against a backdrop of industry challenges outside the direct control of airlines, those that recognize this shift,

and work to meet passengers' increasingly sophisticated connectivity expectations, will increase their satisfaction and loyalty.

With that in mind, this report explores how access to highquality, low-cost (or no-cost) Wi-Fi is not only transforming the passenger experience – as 83% of passengers now say WiFi should be free on flights over six hours – but also dictating ideas and expectations for the future of travel.

In short, passengers are already looking ahead to the next phase in personalized travel. Which is why keeping up with – and exceeding – their expectations can unlock vital new revenue streams and growth opportunities for airlines worldwide.

I hope you find it as useful and insightful as we have.

DBL



Our research

The quantitative research surveyed a statistically representative sample of 11,213 respondents from 11 different countries around the world – the US, UK, Brazil, Germany, Australia, UAE, Turkey, Taiwan, South Korea, India, and China – who had all flown within the last year.

The frequent flyer qualitative research surveyed 100 respondents from the US and UK (50 from each) who had flown on at least six return journeys within the last year.

Research was conducted on behalf of Viasat by Censuswide in August 2024.



Shelli Brunswick Futurist and Innovation expert The report also contains fascinating insights from futurist and innovation expert Shelli Brunswick, a distinguished leader in the global space ecosystem.

Shelli is renowned for her advocacy for space technology and innovation. She bridges the space community and the broader public, fostering collaboration that drives the industry forward. As a futurist, she collaborates with global think tanks and contributes to initiatives that shape the future space paradigm.

Her support for under-represented groups has earned her accolades, including the Top 100 Women of the Future in Emerging Technology and two Lifetime Achievement Awards. She was selected as one of the 100 Voices for Our Planet, an initiative of the United Nations Environment Programme.



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What passengers want



Connectivity is no longer a bonus – it's an expectation

One in three passengers stated that having no Wi-Fi access and being unconnected is one of the most frustrating things about flying today.

It's a clear message to airlines, showing the commercial impact that quality connectivity can have on their business. The next logical – and most positive – step is to reveal passenger priorities, making it possible to deliver exactly what they want.

So that's what we set out to discover. With connectivity shifting in customer minds from an optional add-on to an expected offering, we focused our research on unearthing the new factors that are considered most important when providing access to in-flight connectivity. The survey reveals that, cost, quality and accessibility are all important in nearly equal measure. Free or lowcost connectivity matters most to 36% of passengers when connecting to in-flight Wi-Fi, while having a reliable, consistent connection comes very close behind (35%).

In short, it seems you can't really offer one without the other. Not if you want happy customers.

When connecting to inflight WiFi...



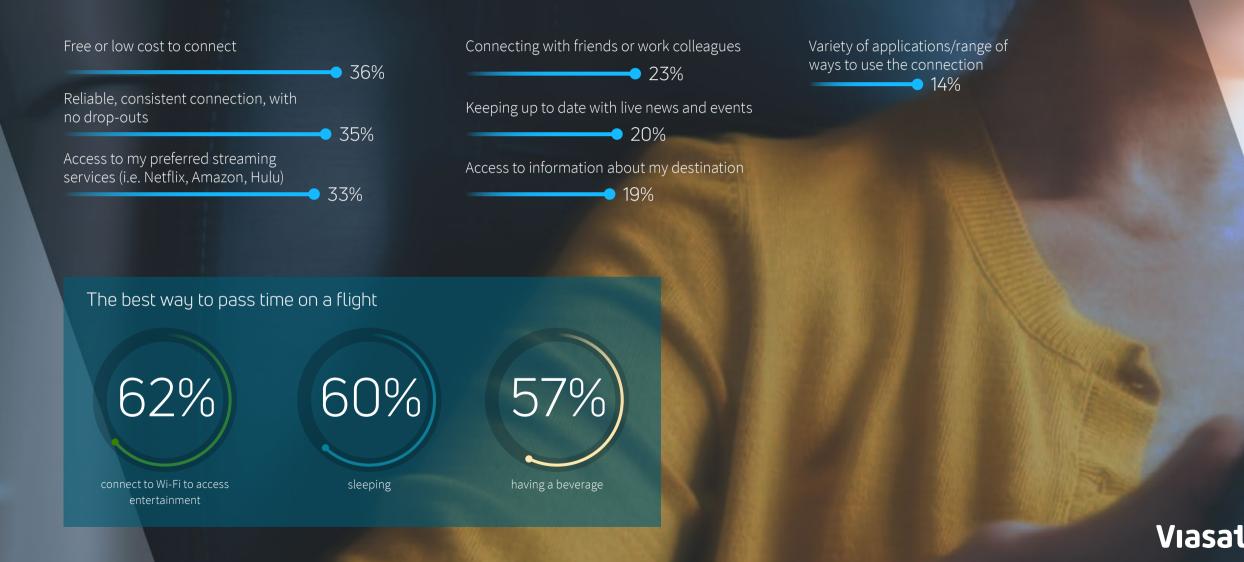
Free or low-cost connectivity matters most

A reliable, consistent connection matters most



What matters most to you when connecting to Wi-Fi in flight?

Being connected beats both sleeping and drinking. When asked about the best way to pass time on a flight, 62% of passengers say they would connect to Wi-Fi to access entertainment – making it even more popular than sleeping (60%) or having a beverage (57%).



Passengers don't just expect Wi-Fi, they want it for free

The rise in the availability of in-flight Wi-Fi has seen a concurrent increase in the expectation that access to this connectivity should be free.

For long-haul flights, passengers are now almost as likely to say that connection to Wi-Fi is important, as they are to say that the connection should be free. They expect Wi-Fi and they don't want to pay extra for it.

In fact, this expectation has increased since last year's survey, demonstrating that access to free Wi-Fi is not a just a trend. It's a sustained and growing demand that shows no signs of slowing down.

Global appetite for free Wi-Fi



think it's important to be able to connect to WiFi on long-haul flights



increases to 95% for China and South Korea



think Wi-Fi should be free on flights over 6 hours long



increases to 90% f respondents in Bra



The longer the flight, the greater the demand for free Wi-Fi

In 2023, only 50% of all passengers surveyed globally believed Wi-Fi should be free on short-haul flights lasting less than three hours. That has grown to 65% this year.

It's a substantial uplift, possibly driven by passenger experience of flights where connectivity costs, or simply because Wi-Fi is now perceived as a must-have, rather than a nice-to-have. For flights over six hours, the percentage spikes by 18%, with 83% of respondents saying that Wi-Fi should be free, while 90% of passengers think it's important to be able to connect to Wi-Fi on long-haul flights.

Correlation between increasing length of flight and increasing demand for free Wi-Fi





Frequent flyer feedback

The qualitative consensus of our respondents underlines the survey's quantitative response. But frequent flyers don't just expect free WiFi – they require it on longer flights, taking their need one step further.

"I would expect it to be offered on long distance flight trips or international flights, where it takes hours to get there." "International flights require free Wi-Fi because of long hours required for the journey." "Possibly not on budget airlines, but I definitely expect it on state carriers for flights of over four hours."

"Free in-flight Wi-Fi has been the hallmark of the US market and now we're starting to see serious demand for this in Europe. It's why surveys like this one are so important to the industry. When passenger expectations are shown in black and white with the figures to back them up, senior management have the evidence they need to convince the C-suite to make the right decisions for the future."

Maik Brueckner Senior Director, Commercial Air, Europe, at Viasat



Passengers are prepared to watch ads in return for free Wi-Fi

While more passengers than ever expect free access to in-flight Wi-Fi, a large majority are willing to watch advertising to secure this.

This is very encouraging news for airlines, highlighting the opportunity to recoup their connectivity investment.

A huge 87% of passengers surveyed are prepared to watch ads in return for access to free Wi-Fi, and almost half (47%) even say they are actively happy to watch ads, thinking it is a fair exchange for the service it enables.

South Korea is the country whose passengers are most prepared to watch advertising, with 94% willing

and a huge 58% happy to engage with ads onboard. China is not far behind, with 93% prepared to watch advertisements.

In addition, 43% are happy to watch ads specifically in return for using social media and 40% would do so to access personal streaming services, such as Netflix.

This marks a shift in opinion from the 2023 survey, when respondents rated watching too many ads as the fourth most likely factor stopping them from connecting to in-flight Wi-Fi.

Global appetite for in-flight advertising

of passengers are prepared

to watch ads in return for

access to free Wi-Fi



which increases to 93% for China



and 94% for South Korea



Personalization breeds loyalty



A personalized in-flight experience is the next frontier

Aside from cost and quality of connectivity, personalized entertainment is a key focus for passengers.

In fact, 71% prioritize access to personalized streaming services – making it the most popular connectivity-based service.

When asked which digital service would most improve their in-flight experience, the popular response is access to streaming services – such as Netflix (41%) – via their own accounts. A third (33%) prefer access to their own music streaming platforms, like Spotify. The interesting common denominator here is the wish to connect via their own accounts, something they find comfortable and familiar.

There are interesting national differences too. 56% of Brazilian respondents say that access to their own TV and movie streaming accounts would improve their in-flight experience, while 48% say it would be improved by access to their music streaming platforms.

The personalization passengers want most

prioritize access to personalized streaming services

71%



of Brazilian respondents say that access to their streaming accounts would improve their in-flight experience 48%

say it would be improved by access to their music streaming platforms say access to streaming services would most improve their in-flight experience

41%





PASSENGER EXPERIENCE SURVEY 2024

The survey also shows that, to make the experience even more personal, passengers want to be able to use a range of devices across different digital and entertainment services. This means onboard connectivity now needs to support the growing trend of 'dual-screening'.

The key finding here is again one of familiarity: passengers using what they know. They want to use their own devices to connect. Which is why, on flights where seatback entertainment is provided, only 6% said they would have no use for their personal device. A massive majority (94%) still prefer to use personal devices for other activities such as web browsing (46%), social media or messaging (46%), online shopping (29%) and work apps (29%).

We should stress, however, that respondents don't discount the use of seatback screens altogether, they just see them as a part of their in-flight entertainment mix – albeit slightly secondary to using their own devices to connect to their own accounts.

Personalization relies on personal devices





would have no use for their personal device

prefer to use personal devices

46%

prefer to use personal devices for social media or messaging

29%

prefer to use personal devices for online shopping 29%

46%

prefer to use personal

devices for web browsing

prefer to use personal devices for work apps



The commercial opportunities – and challenges – of personalization

Passenger demand for in-flight personalized services has doubled year-on-year.

While only 35% of respondents said they'd be happy to share their interests and purchase preferences with airlines, there's a clear demand for personalized experiences when it comes to food and drink offers (48%), access to personal entertainment services (45%), and seatback entertainment recommendations (42%) – suggesting there is a trade-off to be made for the airlines that can meet this demand.

It seems that the more airlines that meet this desire for increased personalization, the more information desires - and the more airlines will be able to benefit from access to this invaluable data.

Interest in personalised experiences aligned to

48%

45%



Percentage of passengers who say they would be happy to share their interests and purchase preferences with airlines





45%





Understanding the new loyalty landscape

75% of passengers say they would be more likely to select or rebook with an airline if quality in-flight Wi-Fi was available on a long-haul flight.

That rises to as much as 83% in the UAE, and 92% in China. Even on shorter flights, 60% say they'd be more likely to rebook if the Wi-Fi was good.

Any airline looking at those percentages can only draw one conclusion: good quality Wi-Fi is now a significant commercial driver and a key factor in securing customer loyalty. In fact, one in five passengers (22%) wouldn't even consider flying a long-haul route with an airline that didn't offer connectivity. 'Getting there' is no longer enough. How you get there and how you feel on the way now matters more than ever. Passengers want to feel accommodated, respected and connected. It is all about the experience, and connectivity is crucial to the creation of a positive in-flight experience.

We expect the ability to meet these demands will play an increasingly major part in boosting airlines' NPS score.

Connectivity is critical to loyal customers worldwide



likely to select or rebook with an airline if quality inflight Wi-Fi is avaiable



rising to 83% in the UAE



and 92% in China 22%

wouldn't even consider flying a long-haul route with an airline that didn't offer connectivity



Frequent flyer feedback

The qualitative commentary is clear: *'if you don't offer reliable Wi-Fi, don't count on me flying with you again.'* In fact, 66% of our frequent flyer panel say they are more likely to rebook with an airline that provides high quality in-flight Wi-Fi.



of frequent flyers are more likely to rebook with an airline that provides high quality in-flight Wi-Fi.

"I once chose a flight specifically because it offered reliable Wi-Fi, allowing me to work during the journey and meet an important deadline, making the convenience of connectivity a key factor in my flight selection." *"It would greatly influence my decision on my next flight. I would be very likely to rebook with such airline."*

"I mainly travel for work and need to rely on my Wi-Fi to send emails and other workrelated things."

"I would definitely choose one airline over another if the Wi-Fi connection was better."



Passengers are willing to pay more for personalization

A surprisingly high percentage are prepared to ensure a personalized in-flight experience by paying extra for what they consider to be key services.

The services respondents were most willing to pay for are focused on staying entertained during flights in line with their on-the-ground preferences.

Regional attitudes to personalized services



of Chinese respondents are happy to pay extra for access to their own streaming account of Brazilian respondents are happy to pay extra for access to their own streaming account

of UAE respondents are most likely to pay for unlimited social

—— 16%

41%

47%

of Indian passengers are likely pay more to access exclusive entertainment content

Which, if any, of the following services would you be prepared to pay a little extra for?





Other live events, such as music concerts

To enter a group chat with other people on the aircraft 15%

To sit in a 'no video call' area

Viasat

The future of flying



Inflight Wi-Fi is empowering passengers to dream bigger

At a time where airlines face a multiplicity of consumer frustrations outside their direct control – congested airspace, flight delays, cancellations, turbulence – this report demonstrates that there's one thing they can offer which will improve the passenger experience and drive customer loyalty: access to high quality connectivity.

In fact, meeting the Wi-Fi demands of passengers today is opening up a world of possibilities for the future of air travel. Passengers are imagining where such connectivity could take the in-flight experience over the coming years and are excited by the possibilities.

A huge 92% of passengers are keen to see innovations made possible on planes in future, highlighting that airlines could go much further in the minds of customers. This is both a challenge and an opportunity for the industry.

So, how can airlines meet these expectations to ensure passengers stay loyal?



of passengers are keen to see innovations made possible on planes in the future





Shelli Brunswick Futurist and Innovation expert

We asked Shelli Brunswick, futurist, innovation expert and leading advocate for the global space ecosystem, to share her thoughts:

"To meet escalating passenger expectations, airlines can draw inspiration from the space sector, where technology has transformed operational efficiency and human-centered design in extreme environments. Connectivity is now foundational; in-flight Wi-Fi must go beyond basic access, delivering highspeed, stable connections that support passengers' needs for productivity, entertainment, and real-time engagement. Seamless connectivity becomes an expectation rather than an amenity, positioning airlines as platforms for continuous digital experience.

"In tandem, personalization is key. Just as space missions leverage adaptive technologies to improve astronaut wellbeing, airlines can adopt passenger-centric innovations, such as modular seating that conforms to individual body types or sensory lighting systems that adjust to circadian rhythms, offering tailored comfort across long-haul flights. Passengers value familiarity, and this can be achieved by enabling access to personal streaming and social media accounts, which replicate the convenience of at-home digital ecosystems in-flight.

"Future-focused enhancements also include smart cabin configurations that support varied needs, from workspaces to restful areas, creating a flexible in-flight environment. Advanced materials used in aerospace, designed to withstand physical stress, can similarly boost airline comfort and durability. By focusing on these features, airlines align with passengers' growing desire for personalized experiences catering to productivity and relaxation.

"Through these strategic upgrades, airlines can elevate passenger satisfaction and build loyalty, creating a new standard for the in-flight journey. Leveraging such innovations positions airlines to remain competitive in a digital-first travel market, turning flights into transformative, tech-enhanced experiences that set a benchmark in the aviation industry."



Passengers are impatient for their dreams to become a reality

Passengers are curious about how their in-flight experience could be further improved if airlines embrace groundbreaking ideas and realize the innovative possibilities of connectivity. The airlines that do so are more likely to be the ones that lock in long-term loyalty and unlock new revenue streams.

So, what do passengers actually want to see on the aircraft of the future?

55% would like enhanced entertainment and sensory in-flight experiences, including panoramic, floor-to-ceiling windows; mixed reality windows displaying digital information about landmarks; outside views displayed across cabin walls/ceiling; immersive, wrap-around seatback screens; and VR entertainment systems. 51% want to see services that improve their comfort and wellness on flights, including access to biomimetic seating with smart materials that adapt to body shape, height, and weight; health and wellness sensors/monitoring; spa treatments; and gym areas.

47% would like to see enhanced in-flight automation, including robot cabin crew; pilotless aircraft; and virtual travel concierges.

Passengers around the world want in-flight innovations



would like enhanced entertainment and sensory in-flight experiences



want to see services that improve their comfort and wellness on flights



would like to see enhanced in-flight automation



Frequent flyer feedback

When asked what they'd like to see on flights in the future, the conversation amongst our qualitative panel focused on two main themes:

Personalization

"Being able to customize meals through the seatback screen before they start serving them and being able to order drinks and snacks via the screen."

"I want to see a more personalized experience for every customer to ensure a more enjoyable flight." "A more personalized experience with assistive technologies."

Comfort and serenity

"Quiet Pods and more sensory, relaxing experiences." "On-screen temperature control for each seat, and enhanced mood lighting." "Adjustable lighting and seats that turn into flat beds with privacy screens."



Passengers believe AI will be key to delivering a superior in-flight experience

As passengers look to the in-flight future, they are particularly interested in how AI-enabled innovations could help improve their in-flight experience.

Excellent connectivity makes AI-based services possible. Viasat-enabled speeds average 22 Mbps, as evaluated by the <u>Wall Street Journal</u>, and passengers are already wondering: what can airlines achieve with that level of connectivity? And – more to the point – when will they do it?

33%

would like to see airport

transfer optimization

Most popular AI-enabled improvements

33%)

33%

would like recognition of food and beverage preferences

want to see a recommended destination itinerary

48%

of Indian respondents would like recognition of their food and beverage preferences



of Chinese respondents would like AI to recommend a destination itinerary



of Taiwanese passengers would like AI-enabled optimisation of their transfer transportation



Frequent flyer feedback

1 in 6 of our frequent flyer panel say they already want to see more AI in the cabin – suggesting everything from "AI service assistants" to "AI-generated in-flight entertainment content".



Shelli Brunswick Futurist and Innovation expert

Again, we asked futurist and space expert Shelli Brunswick for her thoughts:

"Passengers embrace AI for its personalization, efficiency, and adaptability—hallmarks of future-focused space technology advancing in-flight."

"Passengers are increasingly drawn to AI for its ability to deliver personalized, efficient, and responsive in-flight experiences—a trend reflecting the space sector's advancements in usercentric, adaptive technologies. Just as AI is revolutionizing how astronauts interact with their environment, it has the potential to transform air travel by anticipating passengers' needs and tailoring services in real-time. From optimizing meal preferences to suggesting relevant destination activities, AI creates a journey that feels uniquely tailored to each traveller, offering a seamless digital extension of daily life.

"As AI becomes more sophisticated, passengers can expect virtual assistants to handle a range of services, from real-time language translation to in-flight entertainment recommendations. Airlines are beginning to integrate these technologies, but as connectivity improves through robust satellite networks and data processing advances, passengers may see AI-driven services become widespread on planes within the next few years, ushering in a future where each journey is uniquely enhanced by intelligent, interactive support."



The cabin experience of the future?

"Innovations within the airline cabin are transforming the passenger experience, aligning with trends that have reshaped space exploration and human-centered design in extreme environments. With each advancement, airlines are meeting passenger expectations and redefining what it means to travel, creating a future where the journey itself is as fulfilling as the destination."

Shelli Brunswick

51% wa

want to see services that improve their comfort and wellness, like spa treatments and gym areas.

"Airlines are exploring immersive entertainment experiences through VR and wrap-around seatback screens, offering passengers a new level of engagement and escapism during their journey. These innovations allow travelers to tailor their in-flight experiences, whether they seek productivity, relaxation, or enrichment."

Shelli Brunswick

47%

would like to see enhanced in-flight automation, like robot cabin crew and virtual travel concierges.

"With rising demand for personalization and comfort, airlines are moving beyond traditional seating layouts and amenities to offer adaptable, modular designs that cater to varied passenger needs. For instance, multi-functional seating configurations allow airlines to create dedicated zones for work, relaxation, and socializing—spaces that adapt just as spacecraft do to optimize human engagement and comfort in tight quarters.

Shelli Brunswick

would like enhanced entertainment and sensory in-flight experiences – like panoramic or mixed reality windows

55%

"Advanced materials are also enhancing comfort and durability. Lightweight, biomimetic materials, inspired by aerospace technology, are now being incorporated into cabin interiors to increase sustainability and passenger well-being. These materials can reduce fatigue, promote posture support, and even help regulate temperature to ensure a more comfortable environment on long-haul flights.

"Furthermore, lighting innovations are crucial in shaping a relaxing and restorative experience. Smart lighting systems, influenced by circadian science used on space missions, can adjust brightness and color to help reduce jet lag, gradually preparing passengers for time zone shifts as they approach their destination."

Shelli Brunswick





Don Buchman Vice President & General Manager, Commercial Aviation, Viasat

Airlines need to get onboard with the in-flight experience of the future – **fast**

Flying in the near-future will be characterized by unprecedented levels of personalization and comfort within a more technologically advanced environment – all enabled by 'hyper-connectivity'. Those airlines that are the first and fastest to embrace this new reality, are more likely to enjoy considerable commercial advantage and customer loyalty as a result.

Our research found that passengers worldwide are demanding a more personal, digitally connected and operationally efficient travel experience, and they will reward airlines that offer it with their advocacy and loyalty. In fact, in many cases, their ideas for the future are already racing beyond the industry's own imagination.

In the air, we can expect a smarter, comfier, more customizable cabin environment, perhaps with virtual windows offering adaptable views. On long-haul, the likelihood of jet lag will be reduced thanks to dynamic lighting and oxygen-level optimization. Built-in noisecancelling technology could create quiet zones, enhancing rest and relaxation.

Passengers will enjoy seamless, high-speed internet supporting virtual reality (VR) or augmented reality (AR) experiences. From business to entertainment, they will be able to immerse themselves in whatever they choose. Playing games, exploring destinations, meeting clients in a virtual environment, and participating in live events happening on the ground. Personalization will reach new heights with AI-driven services that anticipate passenger needs: from custom temperature settings to personalized meal options based on dietary preferences and health data, every aspect of the flight could be tailored to the individual.

The need for human crew could be reduced by virtual assistants or even holographic attendants, offering everything from travel information to real-time language translation, as robotic service trolleys trundle up and down the gangway in answer to passenger e-orders. All while the plane flies itself. No pilot required.

This will all be possible through the use of ultra-reliable, robust, satellite connectivity. Such connectivity will be the hallmark of future flights, with LEO and GEO satellites helping to provide constant, consistently reliable, in-flight connections.

How well airlines perform in the future will largely depend on how well and how fast they build on the possibilities of such connectivity. By delivering innovative passenger experiences they will attract more bookings and create a foundation of longer-term loyalty. The type of loyalty that could help them weather future industry turbulence.

Ultimately, the case is clear, connectivity will be the cement that will bind – and secure – airlines' futures. The question is no longer 'should we embrace connectivity?'. Instead, it is 'How can we embrace connectivity **better** and **faster** than our competitors?'

As the main driver of great in-flight experiences, connectivity is now the benchmark by which airlines will be judged – by passengers, and by the market.



Methodology

Research was conducted by Censuswide on behalf of Viasat in August 2024.



UK:1515

The quantitative research surveyed a statistically representative sample of 11,213 respondents who had flown within the last year.

The frequent flyer qualitative research surveyed 100 respondents from the US and UK (50 from each) who had flown on at least six return journeys within the last year.

Australia: 1009

South Korea: 755





Viasat is a global communications company that believes everyone and everything in the world can be connected. With offices in 24 countries around the world, our mission shapes how consumers, businesses, governments and militaries around the world communicate and connect.

Viasat is developing the ultimate global communications network to power high-quality, reliable, secure, affordable, fast connections to positively impact people's lives anywhere they are—on the ground, in the air or at sea, while building a sustainable future in space. In May 2023, Viasat completed its acquisition of Inmarsat, combining the teams, technologies and resources of the two companies to create a new global communications partner.

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