TELESAT

LIGHTSPEED™

Earn Loyalty through Connections

The factors that contribute to passenger satisfaction

40%
of passengers connect when inflight Internet is free

65%
of passengers that had access to inflight Wi-Fi in the last year used it

83%
of business travelers are more likely to re-book an airline if they had a positive Wi-Fi experience

Just a few years ago, inflight Wi-Fi was thought to be a “nice to have” to differentiate the passenger experience.

Today, passengers not only expect Wi-Fi, but their customer satisfaction and loyalty is directly influenced by their ability to connect.

Unfortunately, passengers still experience inconsistent inflight connection quality. An international passenger on a long-haul flight likely has connectivity options, but when they change to a smaller plane to reach their final destination, they often encounter different processes to connect to the Internet – or in some cases – no Internet options at all. Often times connected passengers find they can’t run VPN and streaming applications due to the limited, slow speeds available when they connect.

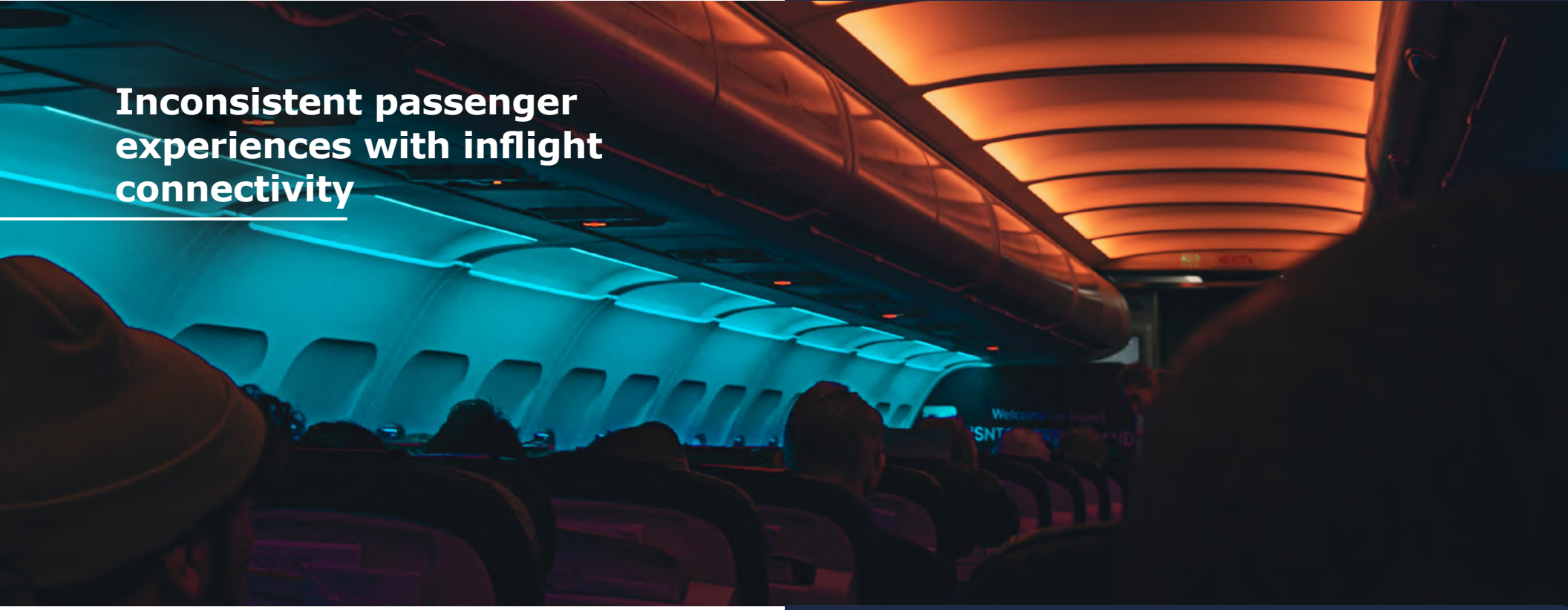
Even with the knowledge that a good inflight connectivity experience positively impacts customer sentiment, some airlines have delayed connecting their aircrafts for a variety of reasons; the technology options are overwhelming, fear that the technology selected will become obsolete, and uncertainty about whether or not airlines can monetize inflight connectivity. Other airlines have forged forward, making new connectivity decisions based on aircraft body type or region of service, which further compounds the inconsistency of experiences across their fleet.

Obstacles to your connectivity success

As you race to close the connectivity gap on all aircraft in your fleet, you need a risk-mitigating approach to delivering an experience that lives up to your brand promise, while minimizing OPEX spending and future-proofing your technology decisions.

- Inconsistent passenger experiences with inflight connectivity
- Inability to support passengers' bandwidth intensive applications
- Reducing connectivity OPEX without sacrificing quality

Inconsistent passenger experiences with inflight connectivity



Today, when airlines are procuring satellite connectivity, oftentimes decisions are made based on aircraft body size or region of service.

For global connectivity, airlines rely on networks that have been stitched together with beams from multiple satellite operators, with each beam delivering varying performance levels. Alternatively, some satellite operators have designed a global fabric by stretching beams to provide blanket coverage, but the capacity available isn't enough to handle traffic in dense flight routes or airline hubs. Furthermore, up to 15% of international flight traffic is in northern latitudes out of the view of Geosynchronous satellites, resulting in service outages for long portions of the flight. These inconsistencies and outages are frustrating to passengers and negatively impact their overall satisfaction.

What if you could...

Be sure that every passenger maintains a consistent connection – from the time they step on board to when they deplane?

Deliver that connectivity at every point on the globe?

Provide that service regardless of how many planes are in a specific area, no matter how many people onboard connect?

With Telesat Lightspeed you can provide "home-like" broadband, gate-to-gate

When you choose Telesat Lightspeed you can be confident that every passenger on every flight will receive lightening-fast Internet connectivity the entire time they are in the cabin, truly differentiating their customer experience.

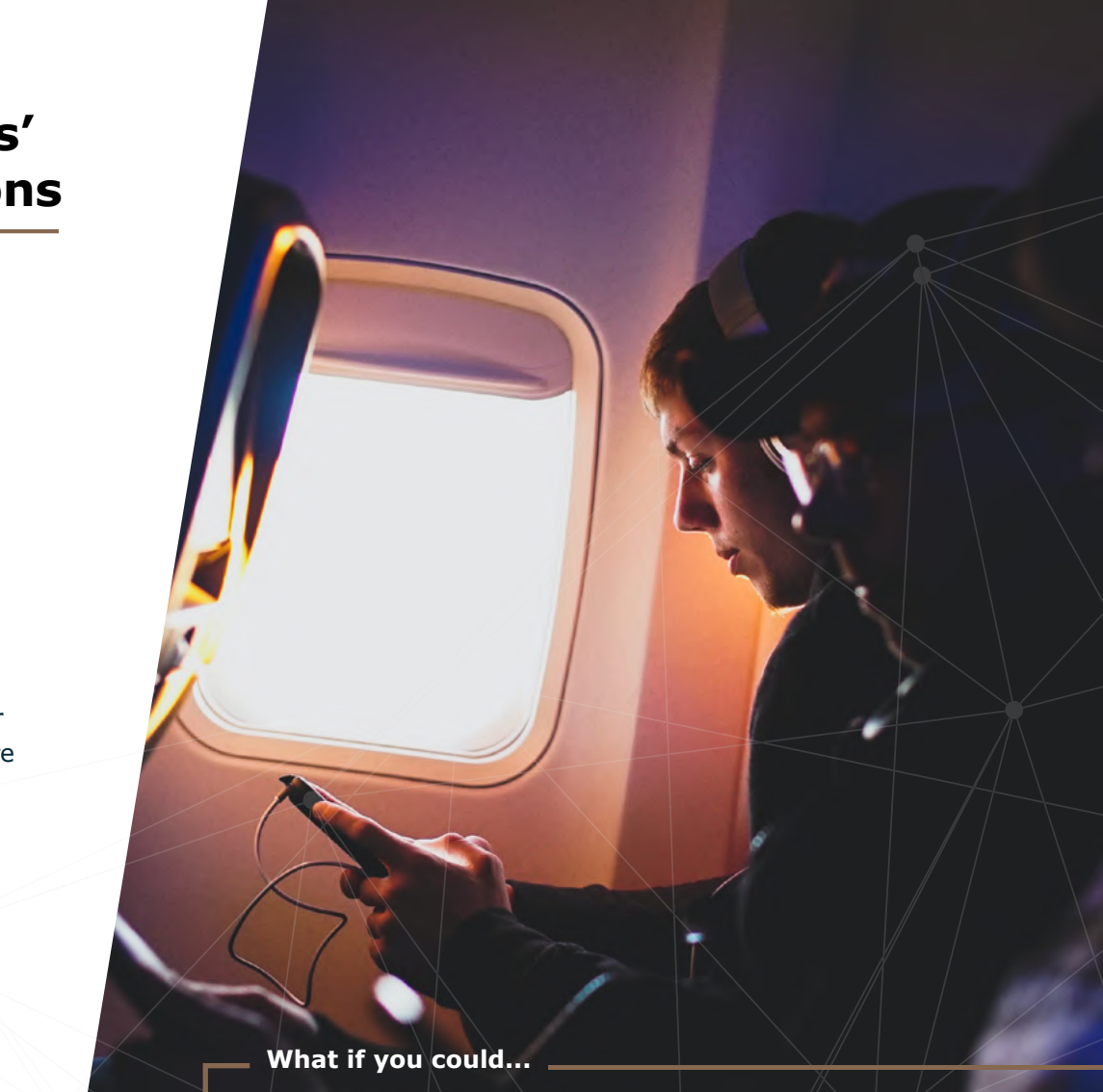
You will erase the poor perceptions of "airplane Wi-Fi" and instead deliver great, broadband service in the air.

With Telesat Lightspeed you can expect:

- A global, resilient, unified space and terrestrial network that provides the most efficient path to handle traffic, enabling a unified approach versus relying on beam-to-beam performance of patchwork architectures
- A smart network that leverages predictive analytics and can dynamically allocate bandwidth to areas with higher usage or congested geographies. This ensures your passengers' experience doesn't trail off during the flight – whether over the poles or approaching their final destination – and allows them to finish their emails, movies, or work during the entire flight.
- Tbps of high-throughput capacity so you can always deliver an exceptional experience to every passenger on every flight, without contention or diminished service levels.

Inability to support passengers' bandwidth intensive applications

Passengers who have access to inflight connectivity oftentimes are frustrated with the slow speeds and bandwidth available to them. With today's satellite-based connectivity options, many passenger applications such as encrypted e-mails are painfully slow due to the lag in sending data to satellites in GEO orbits. Business travelers who rely on their time in the air to progress work initiatives often find that they cannot connect to their VPN because the application times out due to the high latency of the link. Passengers who wish to stream entertainment on flights typically find that the service has been blocked, or there is not enough bandwidth to stream in the first place. Passenger frustration is increasingly voiced via social media and airlines are seeing an impact to their net promoter scores.



What if you could...

Offer connectivity without limiting the user's applications?

Have 200 Mbps guaranteed high-speed access to every plane in your fleet?

Your customers CAN have an "at home/work" Internet experience

"94% of travelers feel that inflight internet would enhance their travel experience."

94% of travelers feel that inflight Internet would enhance their travel experience. Now it is possible to not only meet their expectations, but differentiate their inflight experience through superior connectivity options. You will be able to support every passenger's applications and streaming due to unique features of Telesat Lightspeed, such as:

Low Latency

Telesat Lightspeed satellites are 35 times closer to earth than legacy GEO satellites, which provides a fiber-like experience for Internet browsing, and will support enterprise applications like VPN, encrypted email, and online gaming.

Two-Orbit Design

The patent-pending Telesat Lightspeed design incorporates two orbits to cover the poles and layer capacity in higher populated areas. Phased-array antennas allow us to dynamically move capacity to meet demand where needed, supplying enough bandwidth to support simultaneous streaming to every passenger onboard.

Reducing connectivity OPEX without sacrificing quality

One of the most significant factors impacting airline profitability is the cost of jet fuel, which can swing wildly based on the price of oil.

With 10% to 12% of operating expenses tied to fuel costs, it is important to minimize and tightly manage all other operating expenses.

Knowing that inflight connectivity positively impacts customer satisfaction and loyalty, airlines must grapple with the amount of bandwidth to provide and quality of service while holding costs in line.

What if you could...

Crack the code to achieve fast, cheap, AND good Wi-Fi?

Achieve additional operational efficiencies and revenue streams that offset your connectivity expenses?

Transformative economics for inflight connectivity

Telesat Lightspeed was designed with end-user experience and economics in mind.

With our highly innovative system architecture composed of 198 state-of-the-art satellites, this advanced constellation will deliver fiber-like experiences at truly disruptive economics. Not only can you rely on resiliency, redundancy, and fast connection speeds to meet passenger expectations, but you can also improve operational efficiencies and introduce new revenue stream partners with Telesat Lightspeed services.

With Telesat Lightspeed, you can count on:

- **Global capacity pool:** You are only paying for service where you are using it, with a guaranteed speed to each plane at a fixed price.
- **No data caps:** Leverage unused passenger bandwidth to pull avionics and maintenance data off the plane in real-time to monitor performance and detect maintenance issues before the plane even lands. This minimizes your reliance on congested Wireless Access Points to dump flight data once grounded.
- **Resiliency & redundancy:** With optical laser links that allow satellites to pass data to another satellite without traveling to a gateway hub, you can be assured that your service remains active, even during a satellite anomaly.
- **New revenue streams:** With the reliability and performance of Telesat Lightspeed connectivity, you can confidently pursue telecom and e-commerce partnerships to reach your inflight audience.

Earn loyalty through connections

Memorable and personalized experiences provide true differentiation for travelers, and inflight Wi-Fi can make or break their perception of their customer experience.

Consistency is key to passengers' interactions with your brand, from flight attendant uniforms to plane interiors to food and beverage service. As you strive to differentiate yourselves amongst competitors, phenomenal Wi-Fi experiences can be a key factor to drive loyalty.

Designed with critical features and functionality to solve inflight connectivity challenges faced today, Telesat Lightspeed provides unsurpassed performance at transformative economics, which will result in earned loyalty through Wi-Fi connections.

With Telesat Lightspeed you can ensure you provide an exceptional experience that follows your passenger from gate to gate with:

- A consistent Wi-Fi passenger experiences on every flight
- The ability to support every customer application
- Transformative economics and opportunities for new revenue generation

Telesat has conducted several testing campaigns with leading mobile network operators, including the world's first 5G testing over LEO. Learn more at https://www.telesat.com/leo-satellites/performance-results/

Telesat Lightspeed will enable operators to universally deliver a high quality network that will improve customer experience and drive revenue growth.

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