

OAG®

TRAVEL TECH REPORT 2024

THE FUTURE

OF THE AIRLINE

PASSENGER EXPERIENCE



ABOUT OAG

Every day we at OAG help businesses across the world grow and innovate with access to high-quality travel data. Our mission is to help the travel ecosystem thrive by capturing the power of its data. Today's complex and competitive industry is our biggest adventure yet. With thousands of airlines and airports serving billions of travelers, the pressure is on from all sides: passenger demand, consumer expectations, regulatory complexity, the experience economy, and the drive for personalization. The propelling force in our industry has always been ground-breaking technology. We're built on it - powering frictionless travel in a data-driven world.

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THIS REPORT

In our ongoing exploration of the impact of innovation on the airline sector, which can be found in our [Future of Travel](#) website section, we've recently uncovered the transformative power of technology and data in revolutionizing airline operations and retail.

Now, we're shifting our focus to the heart of the industry: the passenger experience. How have these advancements directly shaped the traveler's journey?

This report dives deep into this question. We're thrilled to present an in-depth analysis focusing on how innovation is reshaping the airline travel experience. From streamlining the booking process to redefining inflight entertainment and loyalty programs, we're uncovering the key trends that are shaping the future of air travel.

Through comprehensive analysis and insightful commentary, we're providing industry leaders with the intelligence they need to navigate this rapidly evolving landscape. Join us as we chart the course towards a future of rapid innovation and excellence in air travel.

CONTENTS

**➤ FLIGHT
BOOKING** *P.5*

**➤ IN-FLIGHT
ENTERTAINMENT** *P.14*

**➤ AIRLINE
LOYALTY** *P.25*

INTRODUCTION

In our ongoing exploration of innovation in the airline sector, we've previously delved into how technology and the strategic use of data have been pivotal forces in enhancing various aspects of **airline operations** – from streamlining terminal procedures and flight operations to refining baggage management. Similarly, we've looked into technology's impact on the traditional pillars of **airline retail**, such as revenue management, distribution, and ancillaries, where the innovative application of data analytics plays a mission-critical role.

However, one intriguing question has remained unanswered thus far: despite a broad range of critical advancements, how significantly do these technological strides resonate with the end consumer – the traveler?

In other words, to what extent have technological innovations directly uplifted the passenger experience?

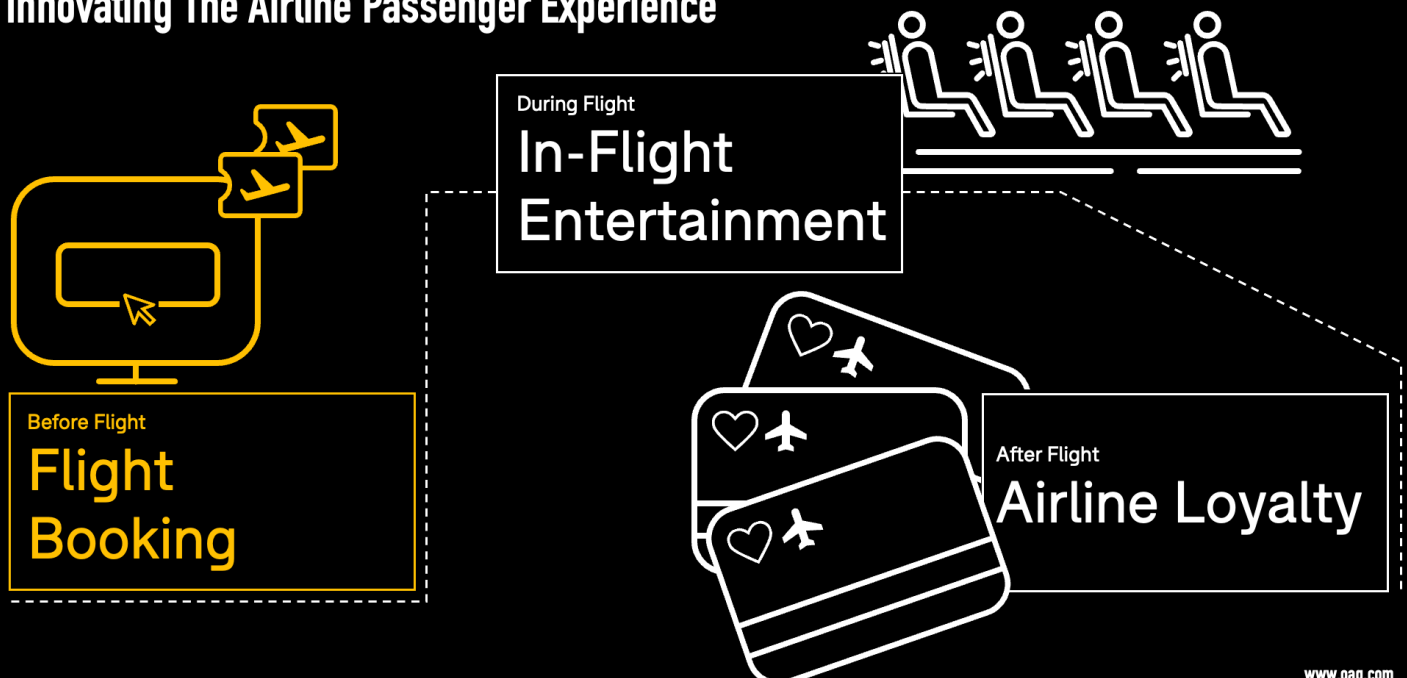
Embarking on this investigation, we created this research report aimed at dissecting the passenger experience across three crucial phases of the travel journey, scrutinizing the tangible benefits digital innovation has brought to travelers.

Our journey begins at the very onset of travel – the booking process.

Let's dive into the contemporary state of booking airline tickets and evaluate how far technology has enriched this initial step of a traveler's journey.

Overview

Innovating The Airline Passenger Experience



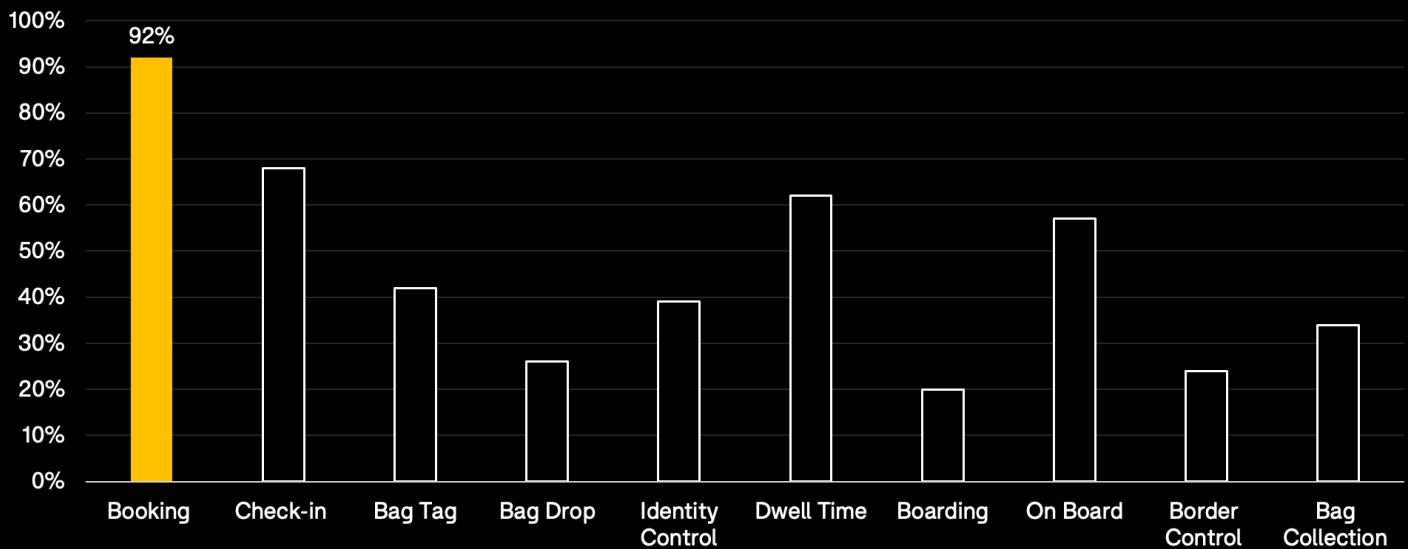
DIGITAL BUT NOT DELIGHTFUL: TODAY'S FLIGHT BOOKING EXPERIENCE



Comparison

The booking stage is almost entirely digitized

Share of airline passengers using technology in 2023



Source: SITA

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When evaluating the extent of technological innovation at the booking stage of the travel journey, it's essential to recognize the high degree of digitization this phase has achieved, which stands out significantly compared to other aspects of air travel.

The latest Passenger **IT Insights Report** by SITA underscores this trend, revealing an overwhelming preference for tech-driven booking methods. A staggering 92% of today's passengers, essentially the vast majority, opt for online booking channels. This encompasses both indirect methods via Online Travel Agencies (OTAs) and direct

bookings through airline websites. Such a figure represents the highest level of digital engagement across all phases of the travel journey. It illustrates the widespread acceptance and normalization of online ticket purchasing that have evolved since the internet's inception and the subsequent emergence of airline websites and OTAs in the early 2000s.

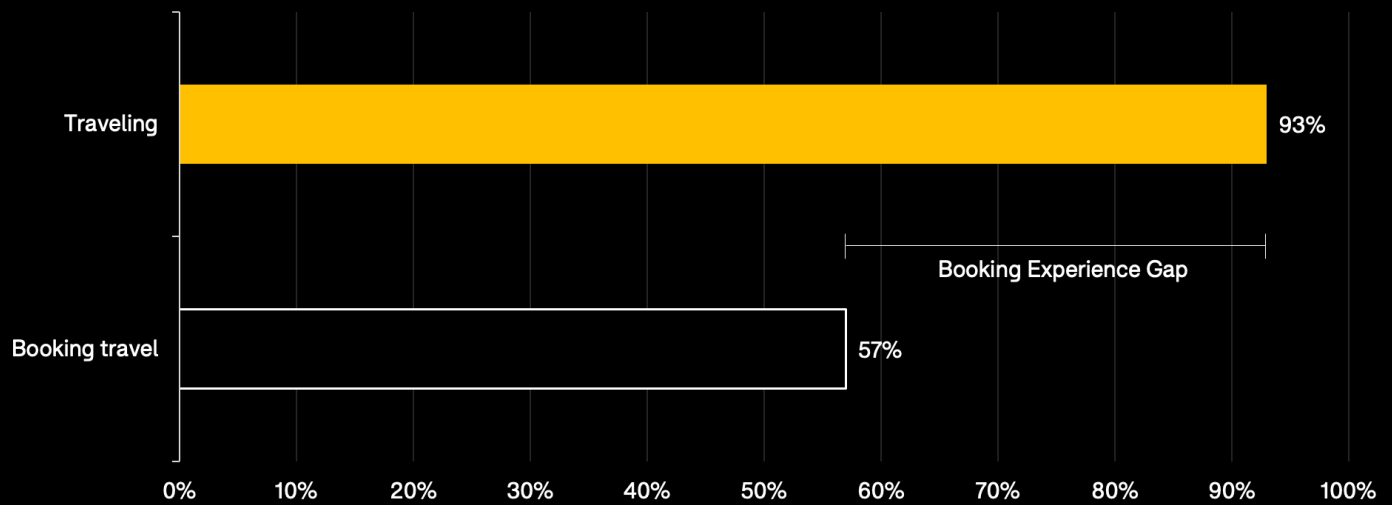
There is no doubt: technology has fully saturated the booking experience.

But is it flawless yet? Let's find out.

Mismatch

Almost everyone loves to travel, but booking travel is less enjoyable

Share of travelers (in the U.S.) enjoying...



Source: OAG Analysis, Travelport

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COMPLEXITY HINDERS JOYFUL TRAVEL BOOKING

Considering the thorough digitization of the booking stage, one might anticipate that traveler satisfaction with the booking process would be exceptionally high, adhering to the belief that more digitization equates to a better experience.

However, the reality is more nuanced.

Travel is universally adored and a cherished activity for most people around the globe. Yet, while the allure of holidays and exploration is undeniable, the process of planning and booking these adventures often fails to inspire joy among travelers.

This sentiment is particularly pronounced in the United States, the world's largest

travel market, where a significant portion of travelers **express discontent** with the booking stage. Nearly half (43%) of U.S. travelers find no pleasure in booking their travels. This statistic signals a crucial area for improvement, and it implies that merely digitizing the booking process is insufficient.

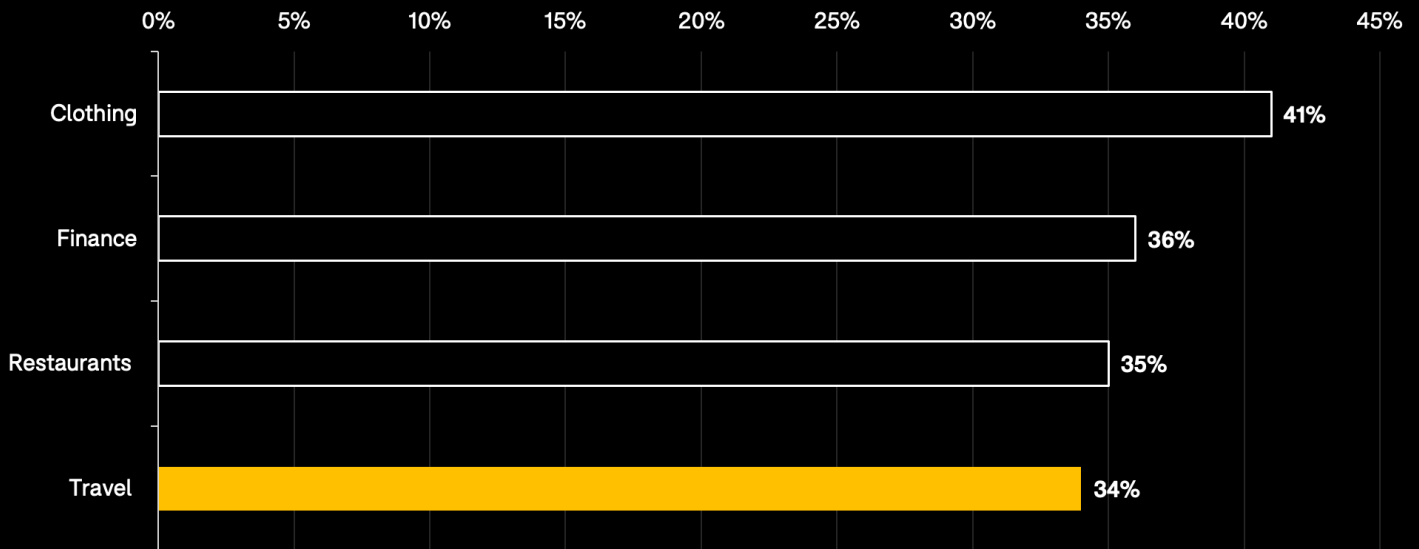
Comparing the airline and travel sector's booking satisfaction scores with those of other industries sheds further light on the issue. Sectors like fashion, finance, and hospitality, such as restaurants, outperform travel in terms of the online booking experience. Consequently, travel does not rank among the top three sectors for ease of purchase.

This discrepancy raises an important question: why does the air travel booking experience lag behind?

Ranking

Other industries offer smoother digital retail experiences

Industries ranked by most innovative digital experience



Source: Travelport

www.oag.com

As we will see in a minute, the primary obstacle to booking airline tickets—and travel in general—lies in its inherent complexity. This industry-specific challenge is a significant factor behind the lower satisfaction scores among travelers, underscoring the need for a more refined approach to the digital booking experience.

FROM MOBILE INSPIRATION TO DESKTOP DECISIONS

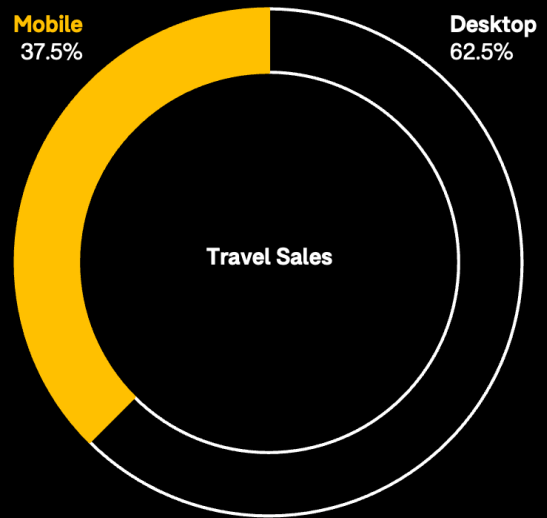
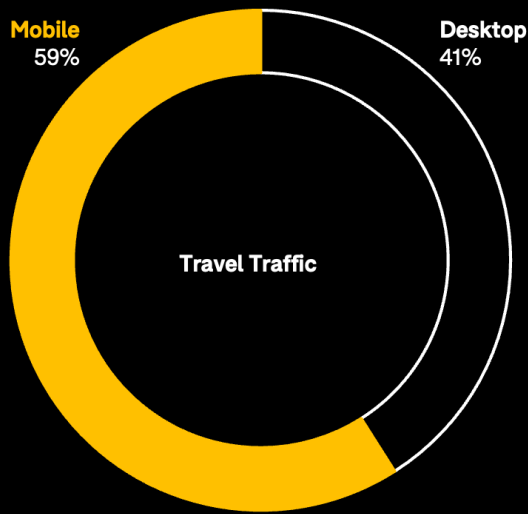
The sentiment that complexity significantly hampers the joy of booking travel online becomes apparent upon examining consumer browsing and booking behaviors, particularly in terms of device preference during the travel discovery phase.

- ➔ Initial inspirations and explorations of potential flight routes and combinations predominantly occur on smartphones, a trend magnified by social media's significant influence on travel decisions. **According to Travelperk**, a staggering three-quarters of travelers in 2023 pointed to social media posts as the spark that ignited their journey to a specific destination.
- ➔ However, as travelers progress towards elaborating on and comparing offers with the intention to book, a notable shift towards desktop usage emerges.

Comparison

Travelers like to browse on mobile, but purchase travel via desktop

Share of desktop vs. mobile for...



Source: SaleCycle

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The rationale behind this shift likely stems from two key factors: the comfort provided by larger screens, which facilitate the simultaneous management of multiple tabs to compare diverse flight and travel options across various websites, and the transition from social media and content apps—primarily accessed on mobile phones—to the more intricate booking environment, which is better navigated on desktop. This behavior is underscored by **recent research** indicating that, on average, travelers view 141 different pages of travel content — and as high as 277 pages for travelers in the U.S. before committing to a travel booking.

The crux of the complexity issue is the disconnected user journey from inspiration to booking and the opaque nature of offer comparisons. While the travel industry, like others, benefits from price comparison sites, selecting the ideal deal extends far beyond mere pricing considerations, incorporating a more comprehensive range of

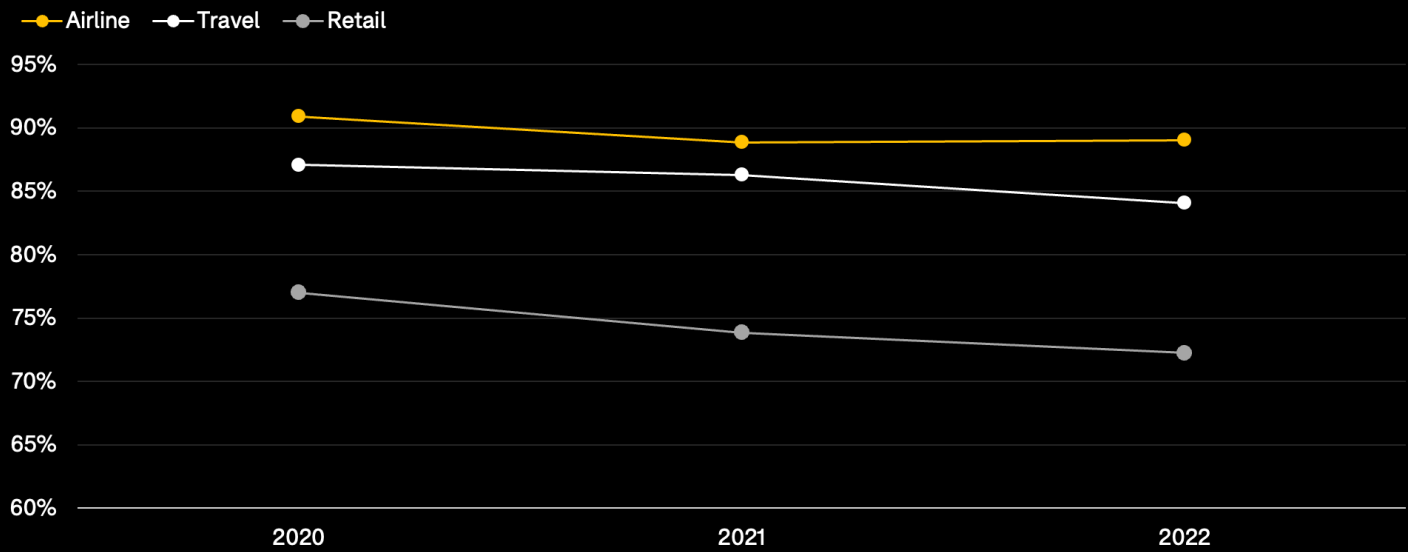
factors such as route preferences, flexible cancellation policies, and even **sustainable travel options**. This multi-faceted decision-making process significantly adds to the complexity, particularly for families. **Research by Travelport** reveals that one-third of families experience difficulty and complain about the effort it takes to compare flight (and hotel) offers, citing a lack of transparency as a significant complicating factor.

This perceived opacity not only complicates the booking process but also fosters a sense of mistrust among consumers, with 60% feeling that the travel industry lacks upfront transparency. This sentiment is further exacerbated by “hidden costs,” contributing to notably high cart abandonment rates on airline websites. Such a trend is partly fueled by the recent unbundling practices related to **ancillary services**, a strategy initially adopted by low-cost carriers.

Trend

Nine out of ten airline ticket shopping carts are abandoned

Cart abandonment rates by sector



Source: SaleCycle

www.oag.com

It's important to note that the heightened abandonment rates in online travel bookings can also be attributed to the extensive research and decision-making process typical of high-cost purchases, compelling consumers to deliberate thoroughly before making a commitment.

THE DIGITAL BLUEPRINT FOR ENHANCED BOOKING EXPERIENCES

Facing the challenges of high complexity and the difficulty of comparing travel options, the focus shifts to how airlines and online travel booking platforms can adapt. A pivotal insight emerges from a [Datalex survey](#), which presents a clear directive from travelers: the booking process is ripe

for its digital transformation 2.0, aiming for heightened personalization, responsiveness, and adaptability to meet the dynamic needs of today's travelers.

Travelers are explicitly calling for improvements in how flight options are curated and presented, demanding that airlines offer a more personalized booking experience. This includes tailored flight suggestions, real-time promotions based on individual preferences, and enhanced flexibility in managing bookings.

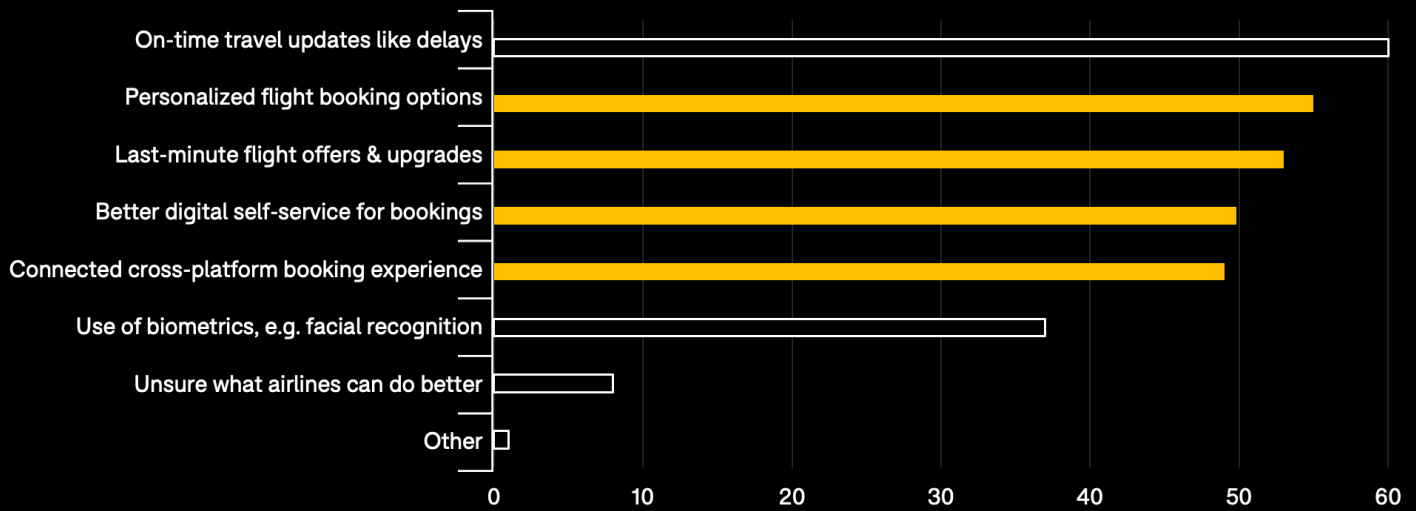
These results underscore the importance of the booking stage, with a significant number of respondents highlighting the desire for digital platforms that can intelligently adapt to their unique travel requirements.

Survey

More advanced booking options are among the most mentioned traveler wishes

“How can airlines better support your end-to-end travel experience through advanced digital technology?”

■ Booking □ Non-Booking



Source: OAG Analysis, Datalex

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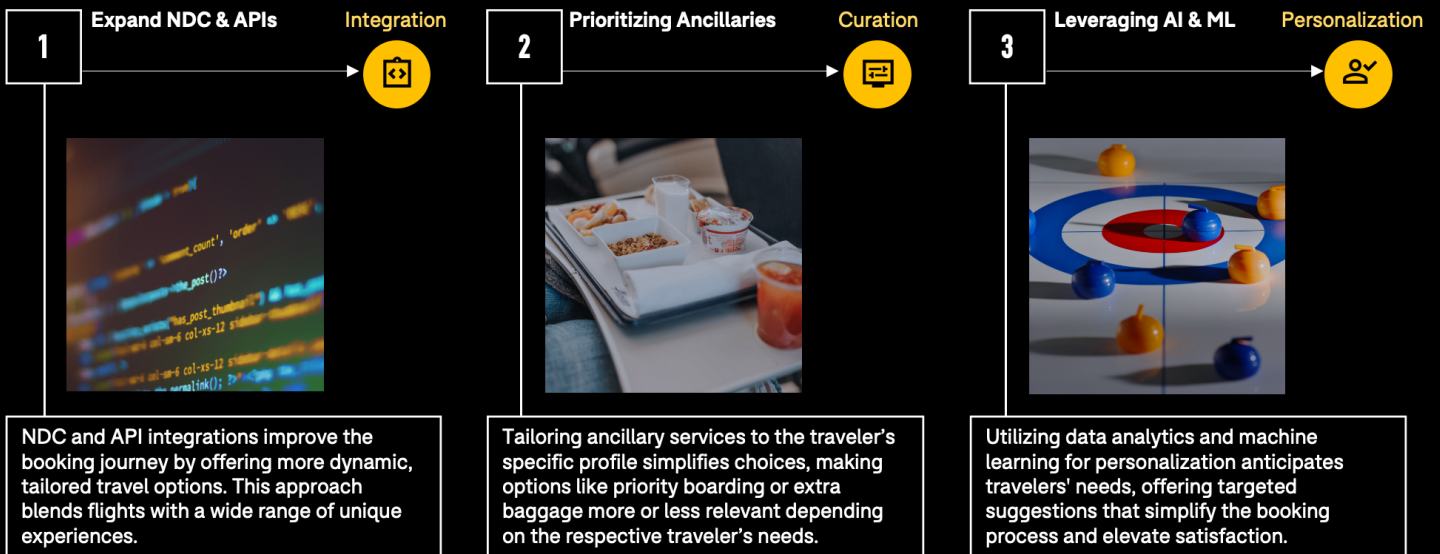
The push towards a more personalized booking journey is not just about adopting new technologies; it's about rethinking how airlines interact with their customers from the moment they start planning a trip. By implementing smarter, data-driven approaches to offer customization, airlines can significantly reduce the inherent

complexity of booking travel, making it a more intuitive and enjoyable process for passengers. Such an approach aims not just to facilitate transactions but to forge a comprehensive digital ecosystem that supports travelers from the moment of inspiration through to booking and beyond.



Solution

Three ways to further improve the booking experience



Source: OAG Analysis

www.oag.com

TRANSFORMING THE BOOKING EXPERIENCE: A THREE-PRONGED APPROACH

To navigate the aforementioned complexities and elevate the traveler's booking experience, airlines can focus on three strategic areas, integrating technological advancements with a deep understanding of customer needs.

1. LEVERAGING NDC AND ENHANCING API INTEGRATION

At the heart of transforming the booking experience lies the strategic use of the New Distribution Capability (NDC) and robust API integrations. NDC enables the delivery of personalized, dynamic content directly to travelers, facilitated by APIs that ensure seamless data exchange between airlines, travel agencies, and other partners. This ecosystem allows for accessing

a wide array of real-time information, from flight availability to comprehensive lodging options, enabling dynamic packaging and offering travelers personalized choices that resonate with their unique preferences – something we explored in depth in our recent [NDC Primer](#). For instance, travelers interested in culinary experiences could receive flight suggestions paired with exclusive dining events or cooking classes at their destination, all within the airline's booking platform. This integration promises a future where travel planning becomes a curated, highly personalized journey, seamlessly blending flights with unique experiences.

2. CURATING ANCILLARY SERVICES TO SIMPLIFY DECISIONS

Redefining how ancillaries are offered is crucial. The focus within airline retail shifts from the quantity of options to the quality

and timing of these offerings. As explored in our **Ancillary Deep Dive**, the effectiveness of ancillary services hinges on presenting the right options at the right moment, tailored to the traveler's journey stage. For example, airlines could offer ancillary options based on the context of each trip and traveler profile. For a business traveler on a short trip, the booking system might suggest priority boarding and a workspace at the lounge, whereas a family going on vacation might see options for extra baggage and airport transfers. This approach transforms ancillary services from a list of extras into a tailored selection that enhances the travel experience, making it more relevant and less overwhelming for the traveler.

3. ADVANCING PERSONALIZATION FOR TARGETED OFFERS

Beyond the technical capabilities offered by NDC and APIs, the future of booking lies in advanced personalization. Employing sophisticated data analytics and machine learning, airlines can now craft highly individualized travel suggestions, promotional offers, and flexible management options for bookings. For example, airlines could analyze past booking behaviors, preferences, and even social media data (with permission) to dynamically personalize the booking interface for each user. This could mean suggesting destinations based on previously expressed interests, offering special deals on favorite routes, or even adjusting the user interface to highlight preferred travel options. For instance, if a traveler frequently books flights on behalf of their family with small children to family-friendly destinations with child-care services, the

booking platform could prioritize similar destinations, offer special offers on family resorts with babysitter availability, or even suggest travel insurance suitable for such vacations. This personalized approach addresses the traveler's desire for a booking experience that not only meets but anticipates their needs, significantly reducing complexity and elevating satisfaction. Furthermore, the emerging role of Generative AI, especially in the form of conversational AI chatbots, as currently tested by **OTAs like Kayak** and airlines including **Qatar Airways**, promises to further enhance personalization in the booking process. Though this application still seems to be a few years away from flawless adoption, its potential to streamline and personalize travel planning is undeniable.

THE ROLE OF DATA IN ENHANCING BOOKING EXPERIENCES

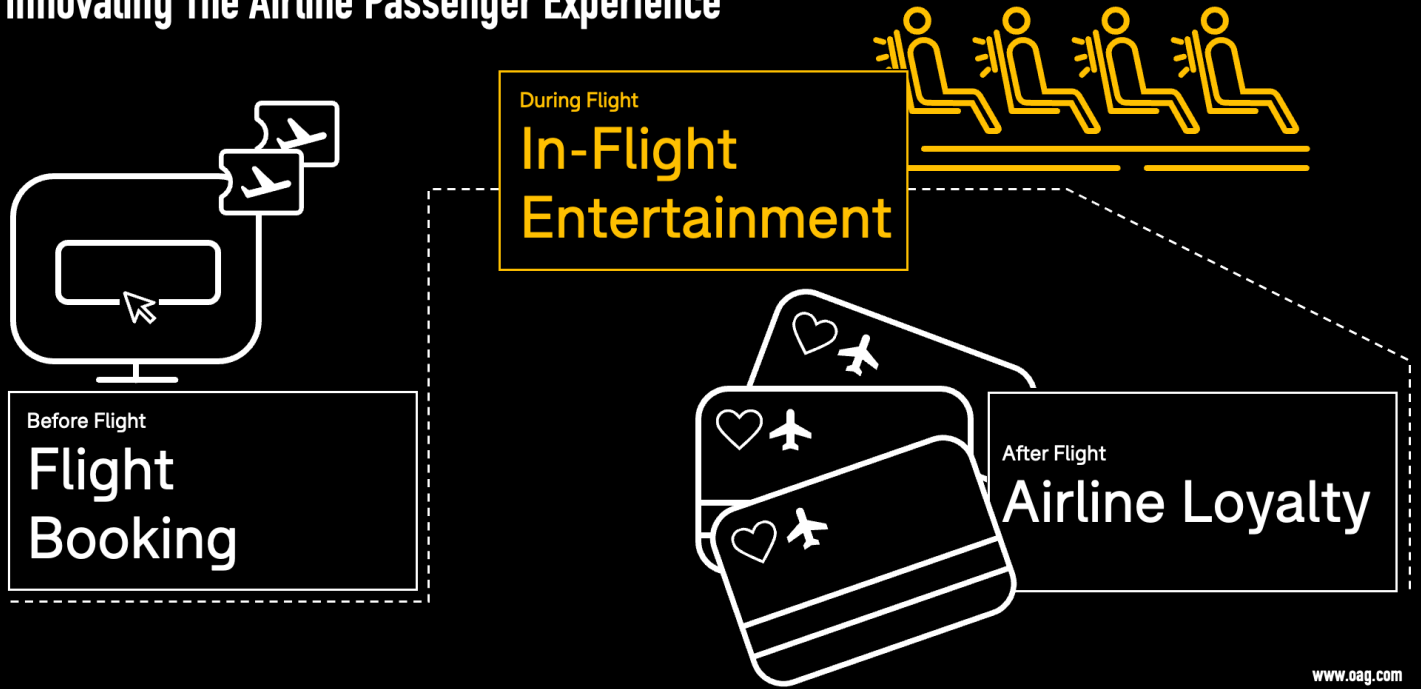
The common denominator across all these strategies is data. The richness and accuracy of data enable airlines and other travel providers to implement these forward-thinking strategies effectively. At OAG, we provide high-quality essential data feeds and analytics to airlines and travel booking innovators to help realize these strategies. Our data enhances revenue strategies by harmonizing data from various multi-source legacy systems, simplifying codeshare complexity, and delivering schedule changes that impact booking behavior. Our expertise and technology transform complex, multifaceted data into streamlined formats so customers can not only envision innovative booking experiences but also implement and scale them.

ELEVATING THE IN-FLIGHT EXPERIENCE THROUGH INNOVATION



Overview

Innovating The Airline Passenger Experience



In the ever-evolving landscape of the airline industry, the transition from inspiration to booking marks just the beginning of a traveler's experience. Our previous exploration into how technological advancements reshape the booking process paves the way for the next critical chapter in the passenger journey: the in-flight experience. Here, the spotlight naturally turns to technology, particularly regarding passenger entertainment.

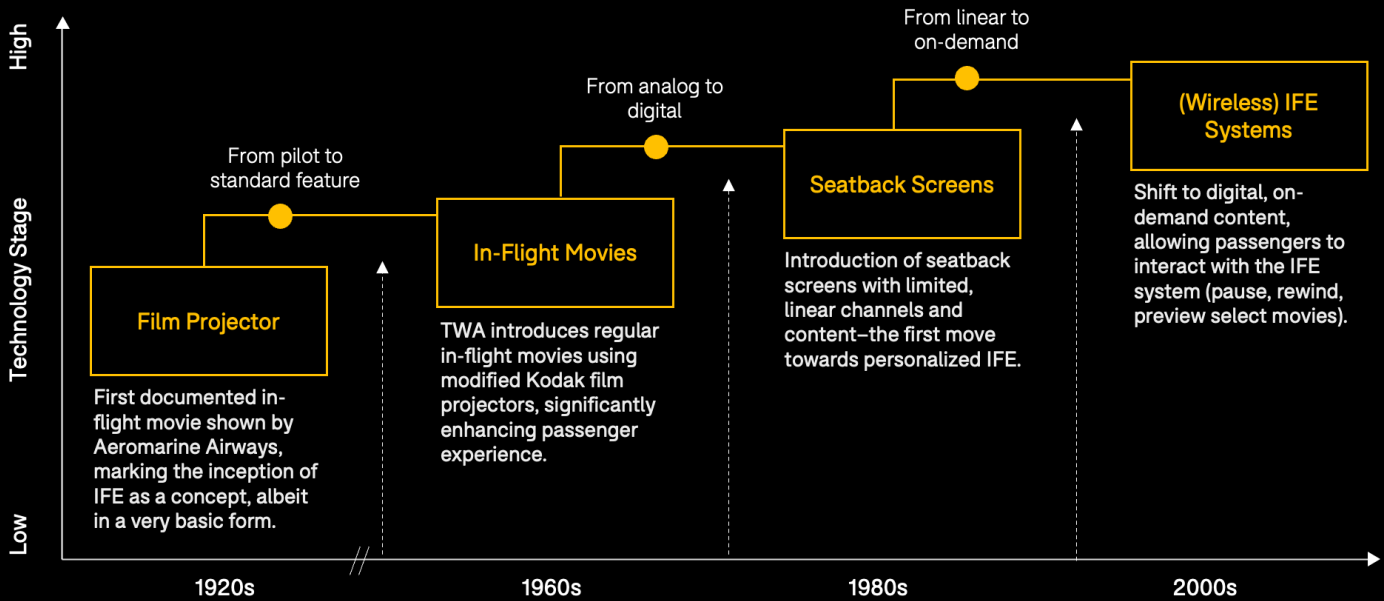
As we climb to cruising altitude in this discussion, we zoom in on the transformation of in-flight entertainment (IFE) systems.

This journey from the early days of overhead projectors and single in-aisle monitors (so-called communal screens) to today's personal seatback touchscreens and Wi-Fi connectivity illustrates how technology has evolved into a critical arena for airlines to distinguish their offerings and enhance passenger satisfaction.

As we peer into this discussion, the growing bring-your-own-device (BYOD) trend poses new challenges (and opportunities) to the traditional role of IFE systems, suggesting a pivotal moment for their relevance in modern air travel.

Transition

The evolution of in-flight entertainment



Source: OAG Analysis

www.oag.com

HISTORICAL OVERVIEW OF IN-FLIGHT ENTERTAINMENT

To properly analyze the current state of IFE systems and onboard entertainment, it's essential to understand the historical context and the evolution of IFE since the inception of commercial aviation.

Drawing on the insightful **overview provided by Lufthansa Systems**, let's delve into the rich history of IFE, a journey marked by entrepreneurial spirit and technological breakthroughs.

The genesis of in-flight entertainment is as old as commercial aviation itself, beginning not with the intent to amuse but to inform. In fact, the world's very first in-flight movie was shown in 1921 and was intended to promote the city of Chicago to

Aeromarine Airways passengers. The first scheduled in-flight movie services were then introduced by TWA, not before 1961. The foundation of IFE was built on novelty rather than necessity.

FROM OVERHEAD PROJECTORS TO PERSONAL SCREENS

A guy named David Flexer experimented with adapting a Kodak film projection system for TWA flights, which marked the "real beginning" of IFE, propelling it into a new era. This "innovation" remained dominant until the development of the Super 8mm film system by a California company named Sundstrand (later Trans Com), leading the shift from film to videotape and setting the stage for a significant evolution in IFE.

The paradigm shift from communal to personal screens further revolutionized the passenger experience. Arn Steventon, a creative businessman, had the visionary idea of integrating miniature LCD TVs into seatbacks during the 1980s, fundamentally changing IFE and paving the way for the personal video screen era. Northwest Airlines' trial of seatback screens in 1988 demonstrated the potential of this technology despite concerns over its high installation costs.

THE DIGITAL REVOLUTION AND ON-DEMAND ENTERTAINMENT

The transition to digital technology in the 1990s introduced the concept of on-demand, personalized entertainment,

marking a crucial milestone in IFE's history. Interactive Flight Technologies (IFT) illustrated the challenges and opportunities of digital IFE, from introducing the world's first interactive video-on-demand system to the dilemmas posed by system reliability and cost.

The narrative of IFE is a testament to its continuous transformation, from analog systems to the current digital, on-demand platforms. It's a story of how technological advancements have sought to create a home-like entertainment experience in the skies, continually pushing the boundaries of what's possible in an aircraft cabin.



CURRENT STATE OF IN-FLIGHT ENTERTAINMENT (IFE) IN 2024

The IFE landscape in 2024 presents a mosaic of traditional systems and innovative digital solutions. The current offerings in IFE have significantly evolved, embracing Wi-Fi connectivity and streaming services, allowing passengers to access a vast array of entertainment options at their fingertips. This shift aligns with the broader digital transformation trends across industries, tailoring services to the increasingly tech-savvy consumer base.

In recent years, the movement towards high-speed satellite Wi-Fi onboard has reshaped perspectives on IFE systems. As more airlines provide passengers with the capability to stream content directly to their personal devices—a change that echoes the Bring Your Own Device (BYOD) trend—some carriers have begun to phase out their in-seat screens. The assumption is that passenger satisfaction will not falter, as people often prefer watching content on their own devices. Moreover, eliminating screens can lead to significant cost savings for airlines by reducing the need for heavy and maintenance-intensive seat-back systems.

This shift has ignited a heated debate within the industry, with American Airlines and Delta Air Lines embodying the forefront of markedly different strategies.

➤ **American Airlines**, the world's largest airline by fleet size, has taken a decisive

step by announcing that it will remove seat-back entertainment screens from its new fleet of Boeing aircraft as part of its interior refresh project known as Oasis. The airline emphasizes its commitment to providing high-quality streaming content and fast internet access, catering to **“over 90% of its passengers”** who bring mobile phones, tablets, and laptops on board.

➤ Conversely, **Delta Air Lines** has chosen to maintain and even expand its seat-back entertainment options. Delta believes in offering passengers flexibility and choice by providing both seat-back entertainment systems and the ability to stream content to personal devices. This strategy highlights Delta's belief in the continued value of seat-back entertainment as a crucial part of the in-flight experience. United Airlines is agreeing with Delta on this strategy, as United is currently installing new seatback monitors on most of its 737 and A320 family aircraft.

This divergence in strategies underscores passengers' varied preferences. While some appreciate the simplicity and personalization offered by BYOD and streaming services, others value the convenience and reliability of seat-back screens, especially on longer flights where stable Wi-Fi signals and device battery life are critical concerns. The latter is one of the reasons why Google Flights has **started listing** whether selected flights offer in-seat power outlets and USB ports.

The debate over the optimal approach to IFE is one to watch in the coming years. Airlines face the complex task of balancing cost, weight, and passenger satisfaction.

The future of IFE may ultimately lean towards a hybrid model that caters to both personal devices and traditional seat-back systems. This approach ensures that all passengers, regardless of their individual preferences, have access to engaging and varied entertainment options during their flight.

- An exemplary model of this hybrid approach, boosted by a distinctive content offering, is JetBlue.
- In the spring of 2023, the carrier partnered with **streaming service Peacock**, enabling passengers to stream Peacock's entire library on both their seat-back screens and personal devices.

EMBRACING A HYBRID APPROACH TO IN-FLIGHT ENTERTAINMENT

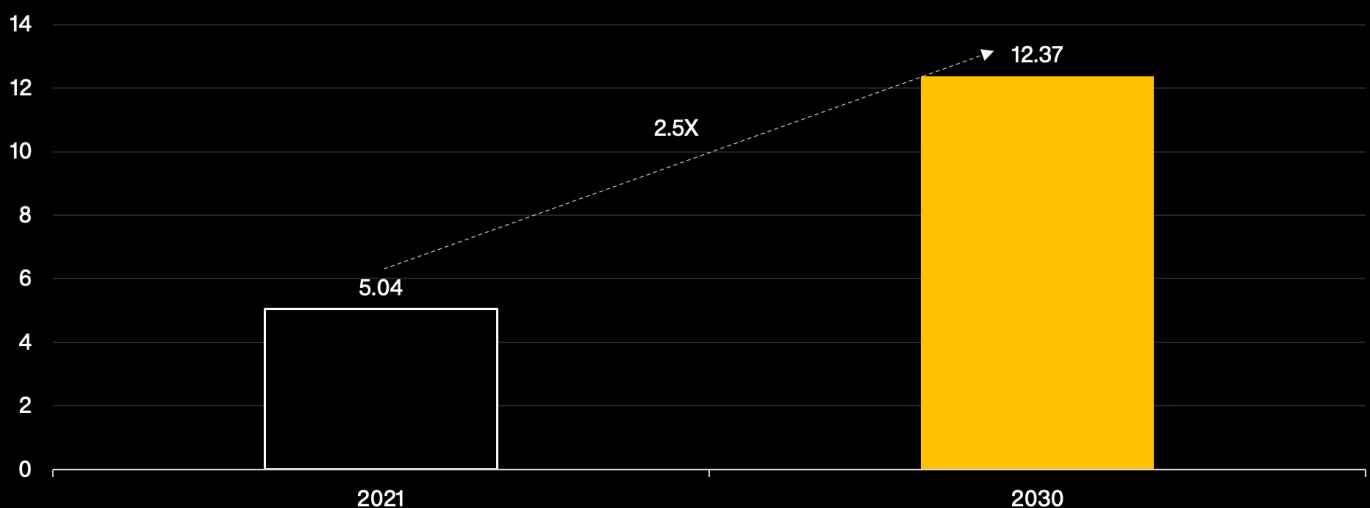
The aviation industry's trajectory seems to be trending toward this hybrid IFE approach as the most suitable path for the foreseeable future. This approach synergizes advanced seatback IFE systems with reliable, high-speed onboard internet, shaping the next generation of in-flight experiences. This combination becomes a significant commercial opportunity for airlines. **Market forecasts** predict the IFE sector, including Wi-Fi, will escalate to over \$12 billion USD by 2030.

Let's explore the key reasons why this hybrid approach might be the most sensible option for airlines going forward.

Forecast

The IFE market is expected to more than double in size until 2030

Projected in-flight entertainment and connectivity market size (in billion USD)



1. NAVIGATING THE WI-FI CHALLENGE

The pursuit of providing in-flight Wi-Fi that matches the ground-level connectivity people know from their living rooms for seamless BYOD consumption presents a complex challenge rooted in technological limitations and the diverse landscape of available solutions. Despite major advancements in recent years, the promise of entirely seamless, high-speed internet in the skies remains partly unfulfilled, advocating for retaining traditional IFE systems alongside digital advancements.

- Satellite internet, while offering extensive coverage, grapples with slightly higher latency and the monumental task of launching enough satellites to maintain consistent coverage over vast areas of land and sea.
- Alternatives like Air-to-Ground (A2G) connectivity, though effective over land, falter over remote or oceanic regions due to their reliance on terrestrial infrastructure, plus the challenge of offering enough bandwidth for every passenger streaming content simultaneously.

This inherent variability underscores the challenge of providing ubiquitous, high-speed internet aboard flights. Major providers such as Intelsat and Viasat, which hold significant contracts with the top 25 global airlines, alongside emerging players like Starlink with its low-earth

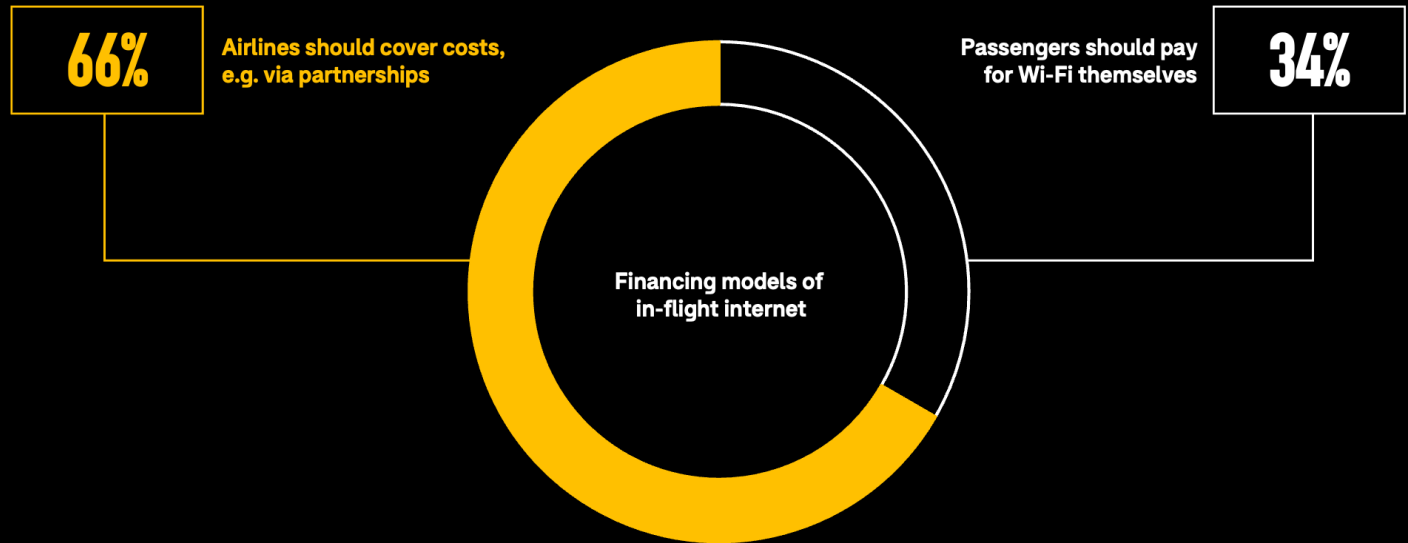
orbit satellites, are at the forefront of enhancing global connectivity. Increasingly, these providers are leveraging detailed OAG data, including airline schedules, load factors, and aircraft configurations. These comprehensive **data sets** not only give insight into the busiest routes but also indicate the demand for Wi-Fi on each aircraft based on how full a flight is in each booking class. Such nuanced understanding allows for more effective satellite positioning and bandwidth allocation, aiming for smoother and more reliable in-flight connectivity tailored to specific airline routes. Despite this evolving market for **airline Wi-Fi via satellites**, achieving ground-like internet speeds in the sky remains a formidable challenge, hindered by technological limitations and the daunting task of expanding satellite networks to keep pace with escalating demands.

The current state of in-flight Wi-Fi—sufficient for browsing but often still stretched thin for high-bandwidth activities like movie streaming—coupled with the debate over who bears the cost illustrates the premature nature of fully discarding seatback screens. The economic model of charging passengers for Wi-Fi versus offering it as a complimentary service adds another layer of complexity to passenger satisfaction and the overall in-flight experience. An Intelsat **survey revealed** a shift toward complimentary Wi-Fi, with two-thirds of industry stakeholders expecting airlines to find sponsorship models or content partnerships to cover costs.

Survey

Majority of industry stakeholders expect inflight Wi-Fi to be free of charge to travelers

Question: Who is expected to pay for onboard Wi-Fi access?



Source: Intelsat

www.oag.com

This finding is **supported by other passenger research**, which shows that A) free Wi-Fi is expected across age groups and for both long—and short-haul flights and B) more than three-quarters of passengers say Wi-Fi is important to them during their flights, up from 55% back in 2018.

2. BEYOND ENTERTAINMENT: THE STRATEGIC VALUE OF IN-SEAT SCREENS

It is important to remember that the utility of in-seat IFE systems transcends mere amusement. Personal in-seat screens offer airlines a spectrum of opportunities to enhance ancillary revenue, display targeted advertising, and elevate the passenger experience with an additional layer of service flexibility.

Singapore Airlines' introduction of its **live online in-flight shopping experience** via the KrisWorld IFE system showcases the

ancillary potential of seatback screens. By offering passengers the convenience of shopping from a curated selection of over 4,000 products and enjoying duty-free prices with options for delivery on their next flight or directly to their homes, Singapore Airlines leverages its IFE system as a powerful retail platform, opening new revenue streams for the airline.

However, the debate isn't one-sided. The rise of Bring Your Own Device strategies offers an alternative avenue for delivering similar ancillary services.

➔ A shining illustration of BYOD's potential is easyJet's collaboration **with technology provider AirFi**. Through trials of the AirFi box, a portable streaming solution, passengers on easyJet's Swiss fleet can connect to an onboard Wi-Fi network created by the AirFi boxes. This connection unlocks access to the airline's onboard shop menu, along with a suite of complimentary digital

services, including flight and safety information, destination content, the in-flight magazine, and a selection of games—all accessible through passengers’ own laptops, tablets, or Wi-Fi-enabled mobile phones.

➤ British Airways has also stepped **into the digital ordering** realm with a platform that allows economy passengers on European flights to order additional snacks and drinks directly to their seats via their personal devices. By connecting to the onboard Wi-Fi service at no extra charge and navigating to a dedicated site, passengers can browse a virtual menu and place orders using major credit cards or Avios points. The move towards digital ordering via passengers’ smartphones is becoming a broader trend in the airline industry these days, with carriers including Jet-Blue offering similar services.

➤ AirJapan’s adoption of the **Blueview digital passenger services platform** is equally interesting as an industry-leading BYOD-focused digital onboard experience. Powered by Bluebox, this platform enriches passengers’ travel experience by allowing them to use their own devices to browse and order from AirJapan’s diverse menu and retail catalog directly. Hosted on the portable Bluebox Wow wireless system, Blueview also delivers engaging IFE content tailored to the destinations AirJapan serves, demonstrating the seamless integration of entertainment and retail in the BYOD format.

Despite all these examples, in-seat screens possess unique advantages, notably their ability to “push” content and offers directly to passengers, ensuring visibility and engagement in a way personal devices cannot guarantee.

Outlook

Three airline examples with promising BYOD retail concepts

1 AIRJAPAN & bluebox



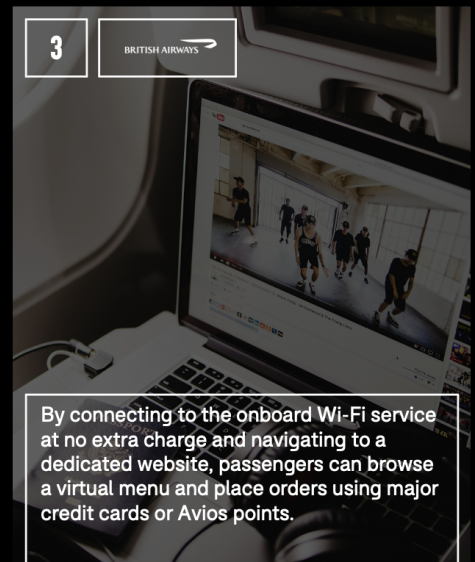
This platform by Air Japan and bluebox enriches passengers’ travel experience by allowing them to use their own devices to browse and order from AirJapan’s diverse menu and retail catalog directly.

2 easyJet & AIRFLAERO



On easyJet flights, passengers can access the airline’s onboard shop menu, along with a suite of complimentary digital services, including flight and safety information, destination content, the in-flight magazine, and a selection of games.

3 BRITISH AIRWAYS



By connecting to the onboard Wi-Fi service at no extra charge and navigating to a dedicated website, passengers can browse a virtual menu and place orders using major credit cards or Avios points.

3. IFE SCREENS AS HELPFUL TRAVEL ASSISTANTS

Building on the concept of IFE screens as powerful platforms for ancillary revenue through retail opportunities, an even broader vista for their application emerges. Beyond facilitating upselling, these screens hold the promise of evolving into comprehensive travel assistants, fundamentally enriching the passenger’s journey.

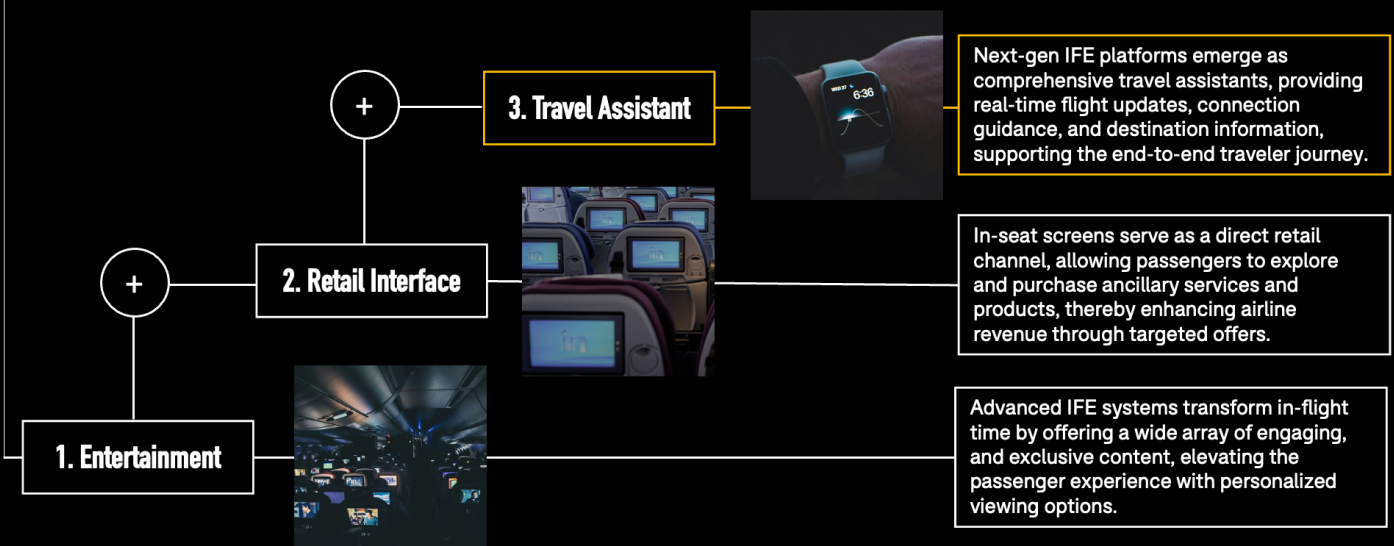
Finnair is one of the pioneers of this visionary use of IFE technology. In 2023, it unveiled a profound **transformation of its IFE system** across its long-haul fleet. This initiative marks a shift towards leveraging IFE systems not just for entertainment or retail purposes but as integral components of the travel experience.

Finnair’s new IFE system is meant to support the passenger’s entire journey through critical support features, such as real-time flight status information for connecting flights and insights into airport services—all from the comfort of their seat. On top of that, the system’s interface is designed to adjust to different flight phases dynamically, aligning the in-cabin atmosphere with passengers’ needs for dining, relaxation, or productivity. Such innovation gives a glimpse into the potential of IFE screens to act as future travel assistants, not only introducing opportunities for up-sell and retail elements but also enhancing the journey with tailored travel information and support services. By integrating functionalities that turn IFE screens into indispensable travel companions, airlines could significantly improve passenger satisfaction and distinguish themselves in a competitive market.

Outlook

IFE systems have more to offer than delivering great entertainment

↑ Evolution of IFE



Source: OAG Analysis

ENVISIONING THE FUTURE OF IFE: BEYOND THE SCREEN AND PHONE

As we chart the evolution of in-flight entertainment, it's clear that the skies are on the brink of a transformative shift. While the hybrid model of IFE systems and BYOD strategies currently presents a practical path forward, the advent of spatial computing devices like the Apple Vision Pro presents an entirely new horizon for the passenger experience.

This speculative yet plausible future, where virtual reality and metaverse headsets redefine the essence of in-flight entertainment, offers a glimpse into a world where the conventional seatback screen and smartphone might become artifacts of the past.

Apple's Vision Pro, with its promise of an immersive, personal 4k movie theater experience, not only underscores the potential for unparalleled privacy and entertainment freedom but also signals a shift

towards a more personalized, boundary-pushing onboard journey. While tech enthusiasts who have already experienced flights through the lens of VR headsets point to an unprecedented level of immersion and comfort, **redefining what it means to be "in-flight,"** it's important to note that the use of such devices on board may be subject to airline policies and regulatory approval. These considerations are crucial to ensure safety in emergency situations, and regulators are currently evaluating the implications of the widespread use of VR headsets in flight.

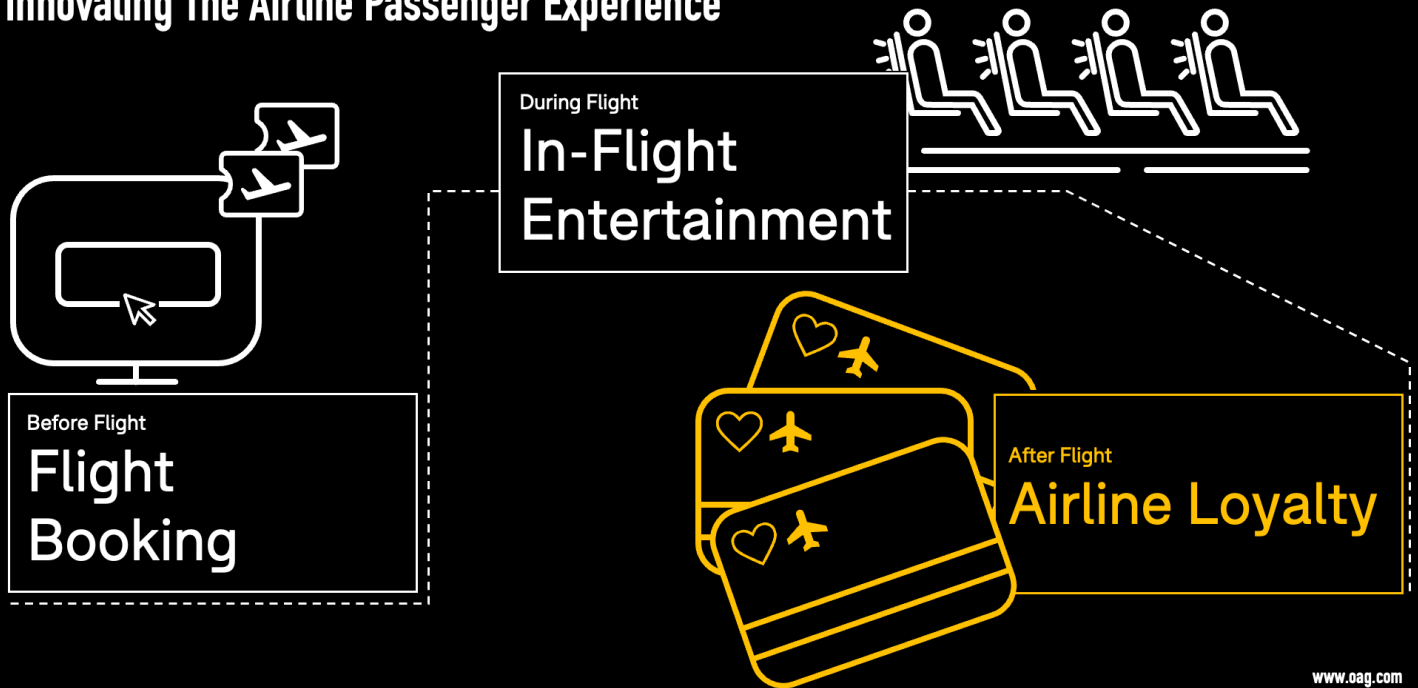
As we peer into this speculative future, the trajectory of IFE systems remains a captivating field to observe. The journey there will be marked by innovation, user adaptation, and evolving expectations. One thing is certain: the exploration of how we entertain, engage, and enhance the passenger journey mid-flight is far from reaching its limits, promising a future ripe with possibilities and new dimensions of travel.

REDEFINING LOYALTY: THE NEXT FRONTIER IN TRAVELER RELATIONSHIPS



Overview

Innovating The Airline Passenger Experience



Traditionally, loyalty has been synonymous with reward points and tier statuses, but as we move further into the digital age, the very fabric of loyalty programs is undergoing a significant transformation.

The airline industry stands at an exciting intersection, with traditional loyalty models being challenged by changing traveler behaviors and expectations. Today's travelers are looking for more than just points they can spend on a kitchen pot from the loyalty magazine - they seek flexibility that aligns with their lifestyle and values. This shift necessitates reimagining loyalty programs to maintain relevance and re-establish deeper connections with customers.

THE HISTORICAL SIGNIFICANCE OF AIRLINE LOYALTY PROGRAMS

Before delving into the accelerating transformations in airline loyalty strategies, it is essential to understand the historical context of these programs and their critical importance to airlines.

American Airlines pioneered customer loyalty in the airline industry with the launch of the AAdvantage program in 1981. This initiative marked the beginning of what would become a global industry standard, with many airlines, especially international legacy carriers, subsequently developing their own loyalty programs.

These programs have become mission-critical for airlines for several reasons: primarily to incentivize customers to choose a particular airline for their travel needs, even when other options might offer more direct routes or lower prices. Moreover, as we'll explain further below, loyalty programs have evolved into lucrative revenue streams for airlines, often generating substantial profits that rival or even surpass those derived from their operating networks. British Airways, for example, makes £1 million a day in profits for its owner, IAG, [according to The Times](#).

In simple terms, the impact of loyalty programs today extends well beyond simple customer retention.

1. CREDIT CARD PARTNERSHIPS

In 1987, American Airlines once again revolutionized loyalty programs by partnering with Citibank to offer a branded credit card. This card allowed customers to earn points redeemable for flights, setting a new industry standard. Today, such partnerships are ubiquitous, linking credit card spending with airline loyalty points. This evolution has transformed traditional frequent-flyer programs into complex, multifaceted systems that go beyond simple travel benefits. Airlines have discovered that frequent-flyer miles are not just a tool for customer retention but a valuable currency that can be sold to third parties, such as banks issuing co-branded credit cards. This model functions as follows:

- ➔ Airlines generate points out of “thin air,” [as The Atlantic describes it](#), and sell them to banks at a profit.

- ➔ Banks award these points to cardholders as rewards for spending, benefiting from transaction fees.
- ➔ Cardholders can redeem points for flights or other goods and services, typically through airlines' e-commerce portals.

This setup is highly advantageous for airlines. They receive immediate revenue from selling points, while the actual cost of redemption is deferred—and sometimes avoided altogether if points expire or are forgotten. Pre-pandemic, [McKinsey estimated](#) the number of unredeemed airline miles sitting in accounts at 30 trillion—enough to let almost every airline passenger in the world redeem miles for a free one-way flight back then—if miles could be redeemed for trips without restrictions.

2. FRAGMENTATION OF FARE CLASSES

In the following years, airlines began diversifying fare classes and introduced a more advanced ticket pricing structure as a result of the dynamic pricing movement, which we [previously explored](#) in more detail. This change allowed airlines to segment the market more finely and adjust pricing more dynamically according to demand and customer profile.

As a result, airlines soon took another spin on loyalty programs by shifting the focus of loyalty rewards from miles flown to money spent. This change aligned loyalty programs more closely with airline revenue, recognizing that the amount a customer spends is a better indicator of their value to the airline than the distance they travel.

Ranking

Airlines' billion-dollar loyalty programs

Top-10 ranking of the most valuable airline loyalty programs

Rank	Airline	Loyalty Program	2020 Valuation (USD M)	2023 Valuation (USD M)	Growth
1	Delta Air Lines	SkyMiles	25,391	27,923	+10%
2	American Airlines	AAdvantage	23,440	23,922	+2%
3	United Airlines	MileagePlus	20,172	22,001	+9%
4	Southwest Airlines	Rapid Rewards	8,013	8,828	+10%
5	Lufthansa Group	Miles & More	7,418	7,971	+7%
6	British Airways, Iberia, Aer Lingus, Vueling	IAG Avios programs	5,138	7,084	+38%
7	Air France-KLM, Kenya Airways, Tarom	Flying Blue	6,675	6,923	+4%
8	Air Canada	Aeroplan	6,331	6,840	+8%
9	Korean Air	SkyPass	4,375	4,594	+5%
10	Cathay Pacific	Cathay	4,701	4,552	-3%

Source: On Point Loyalty

www.oag.com

THE VALUE OF AIRLINE LOYALTY PROGRAMS

The financial significance of this system is profound. Some Wall Street analysts value major airlines' mileage programs **more highly than the airlines themselves**. This valuation reflects the programs' ability to generate consistent revenue streams, particularly from selling miles to credit card companies and other partners.

The resilience of these programs was especially evident during the COVID-19 pandemic. For instance, US airlines could secure crucial financing by collateralizing the cash flows from their loyalty programs when other revenue streams were almost entirely disrupted. For example, **CBS reported** how:

- ➔ United raised \$6.8 billion USD backed by its program;
- ➔ Delta was able to borrow \$9 billion USD;
- ➔ and American Airlines set a record for the largest financial transaction in airline history—\$10 billion USD, backed by AAdvantage's intellectual property and cash flows.

Also, globally, the robust revenues from mile sales to non-air partners played a critical role in keeping airlines afloat.

British Airways-owner IAG, for example, had American Express pay the airline group **750 million pounds** (\$955 million USD) to renew their partnership, which saw

American Express pre-purchasing Avios points for its British Airways co-branded cards and membership rewards program. This was a welcome boost to the airline’s finances at a time when it was burning through cash and gave the carrier much more breathing space when many speculated it had to raise new equity to survive the pandemic disruption.

In summary, loyalty programs have evolved from simple airline retention tools to complex ecosystems that significantly enhance airline profitability and financial stability. They stand out as one of the most lucrative assets on airlines’ balance sheets, notable for their steadiness in challenging operating environments.

THE DIMINISHING APPEAL OF TRADITIONAL LOYALTY PROGRAMS

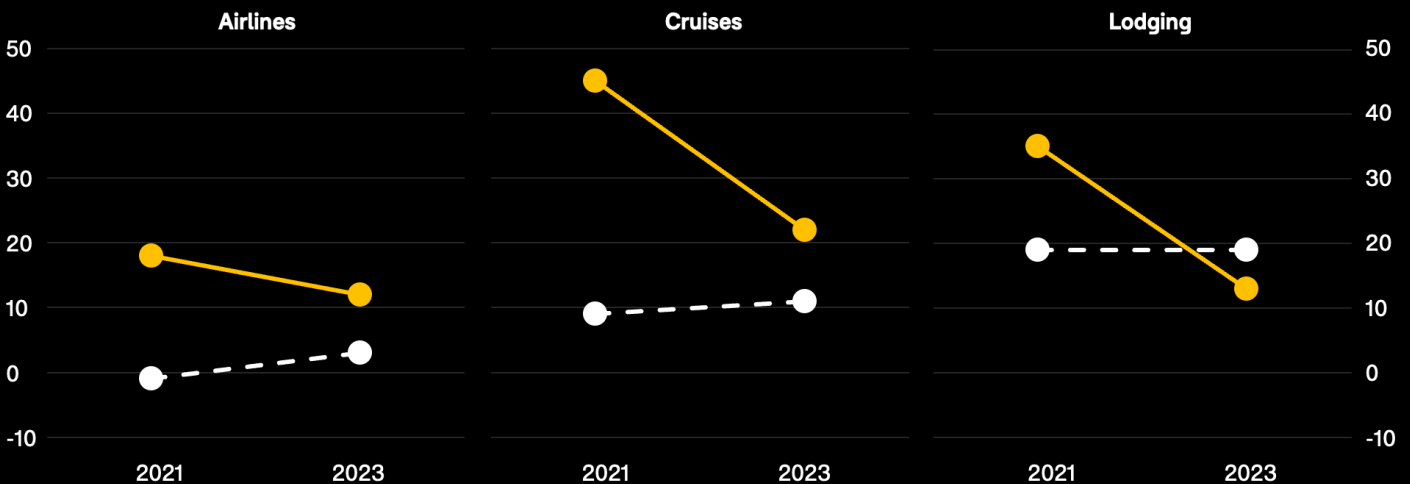
Despite the historically important role of loyalty programs for airlines, the landscape is shifting. There was a time when business travelers frequently made decisions based predominantly on loyalty benefits, going out of their way to fly with specific carriers to accumulate miles for the next tier status or to redeem for their bucket-list dream vacation. However, such behaviors are increasingly becoming relics of a pre-COVID world, less reflective of today’s travel realities.

Trend

Loyalty programs are losing appeal across travel categories

Likelihood (in %) of travelers recommending loyalty program and brand to a friend or colleague

— Loyalty Program - - Brand



Recent **loyalty surveys** have shown a clear trend:

- The likelihood that customers would recommend an airline’s loyalty program to a friend or colleague has steeply declined.
- This decline is notable because it contrasts with the relatively stable likelihood that customers would recommend the airlines themselves.
- This discrepancy suggests that while the service quality of people’s favorite airlines might remain appreciated, the loyalty programs no longer hold the same value or appeal to passengers as they once did.

This trend is not isolated to the airline industry alone. Similar patterns of declining loyalty program appeal are observed

across other travel categories, such as cruise lines and lodging. This broad-based decline across travel sectors suggests a fundamental shift in consumer attitudes towards loyalty.

This shift becomes even clearer when comparing the mismatch between loyalty offerings in the eyes of airlines and actual customer expectations from travelers. **iSeatz undertook a dual survey** among loyalty providers and loyalty customers to get a clear picture of how loyalty providers view their loyalty programs compared to consumers.

- A significant 92% of loyalty providers believe their program is delivering on travelers’ needs.
- In stark contrast, only about half of travelers feel the same.

Comparison

Clear mismatch between loyalty program value and traveler expectations

Share of industry respondents saying that...



RETHINKING LOYALTY: A CALL FOR INNOVATION

These insights reveal a growing gap between how airlines view their loyalty programs and the evolving expectations of today’s travelers. This divergence highlights an urgent need for airlines to reassess and potentially redesign their loyalty strategies to better align with contemporary traveler preferences.

This might involve integrating more flexible reward structures, increasing the personalization of offers, or even rethinking the very definition of loyalty in the airline context. To decide which path to embark on, it’s important to understand the shortcomings of today’s airline loyalty programs from the traveler’s perspective in more detail and how they came about.

We see two underlying reasons for the shift in loyalty dynamics.

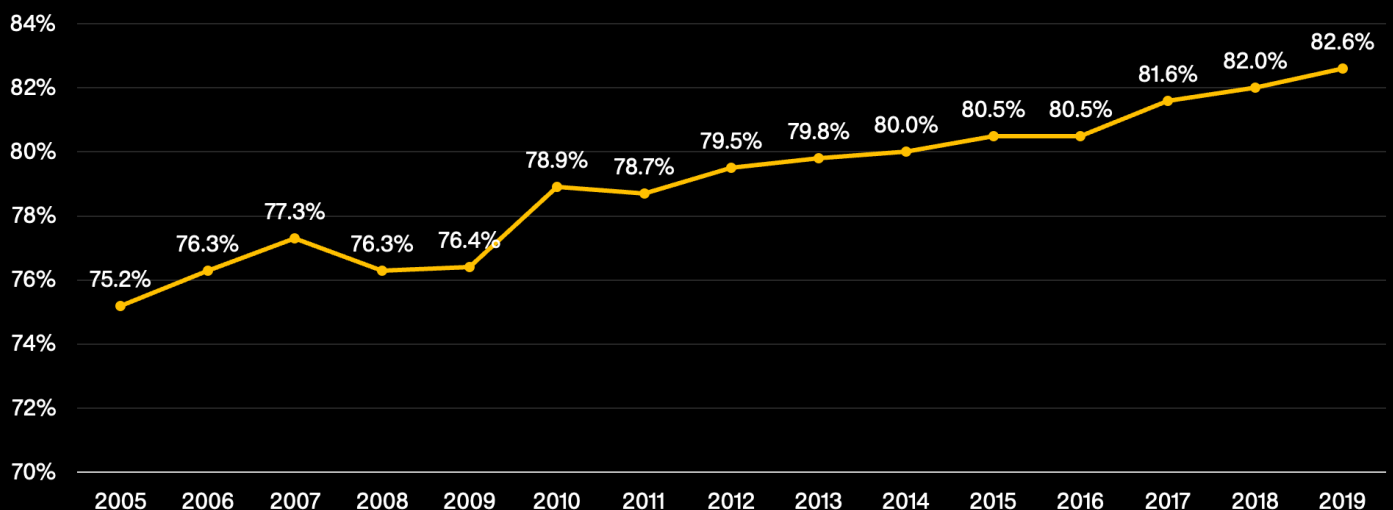
1. DECREASED OPTIONS DUE TO CONSOLIDATION AND FULLER FLIGHTS

Due to the consolidation of major airline brands, airline travelers have fewer options than they did in the past. This consolidation makes it harder for frequent fliers to switch airlines without losing access to convenient flight routes or departure times. Moreover, customers who have banked a large number of miles or points with one airline or hotel program can feel locked in.

Secondly, flights are generally also fuller than they used to be, with the average load factor across all airlines increasing significantly over the past decades. The average load factor has increased from around 55% in 1970 to **more than 82%** today (ignoring the pandemic dip). This increased occupancy is attributed to various factors, including improved pricing and inventory

Trend Airline flights have become a lot fuller over time

Passenger load factor of commercial airlines worldwide



Source: IATA, ICAO, Airfinance Journal, Refinitiv, S&P Global Platts, Statista

control systems (see our [revenue management primer](#)), alongside many broader socioeconomic shifts, such as increased affordability of air travel, rising disposable incomes, and evolving consumer preferences, to name a few.

As a result, airlines have less flexibility to offer free flights to their loyalty members. Many carriers have made frequent-flyer redemptions [harder to obtain](#) by introducing additional fees, tightening stopover rules, and restricting redemptions through partner programs. Almost every airline has gradually increased the number of miles needed to redeem a seat. The result is that travelers experience fewer status upgrades and rewards, especially for long-time loyalty members. This [becomes frustrating](#) when they reflect on their statuses from the past.

2. GENERATIONAL DIFFERENCES IN LOYALTY PERCEPTIONS

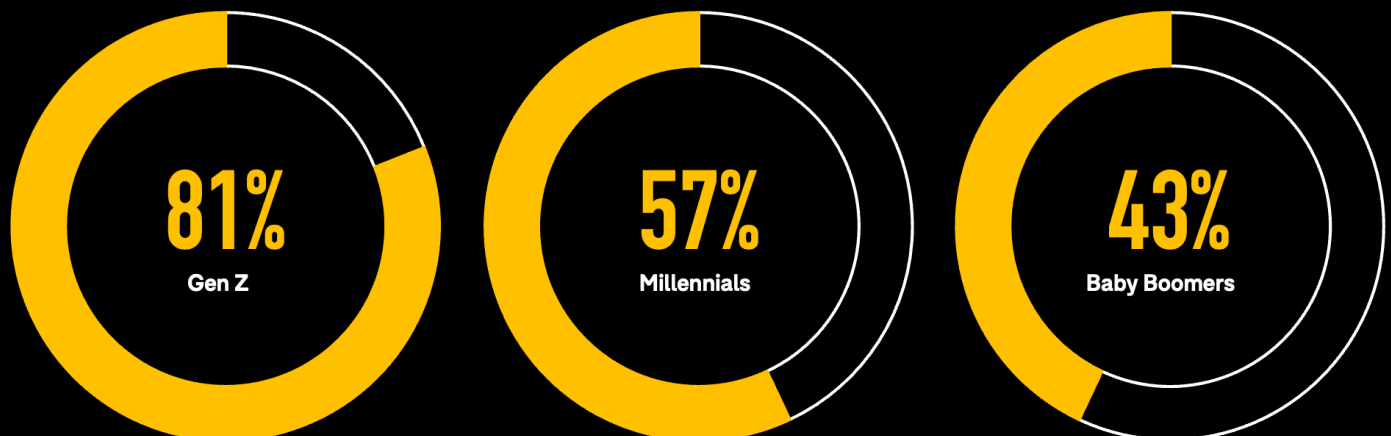
McKinsey research indicates that loyalty program members today aren't especially loyal in the first place, particularly among younger generations like Gen Z and Millennials. According to their [2023 survey on travel loyalty](#), younger generations consider and transact with significantly more competing travel brands than older generations. This behavior challenges the fundamental concept of classic loyalty schemes.

Additionally, experiential factors such as "offering an experience worth paying more for" and "feeling taken care of" have become more important over time and now account for three of the top five drivers of loyalty (among 40 drivers in total) to cruise lines, hotels, and airlines.

Comparison

The younger the customer, the more open they are to personalization

Share of respondents by generation in the U.S. preferring personalized ads over non-personalized ads



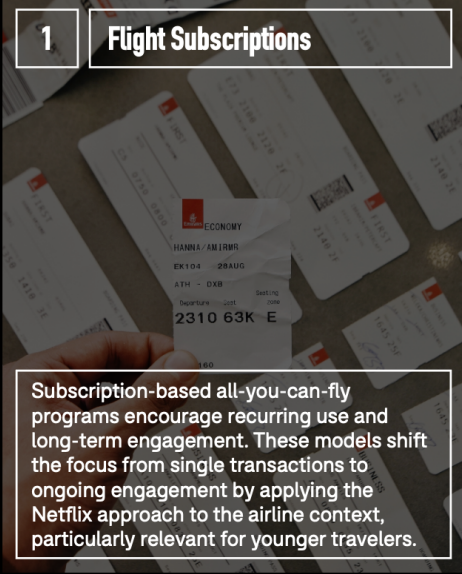
Lastly, different traveler groups prefer different types of rewards, emphasizing the need for hyper-segmentation in loyalty programs. 78% of consumers are more likely to make a repeat purchase when offered a personalized experience. The goal should be to achieve such nuanced hyper-segmentation of program members, resulting in a “segment of one.” This trend towards personalization is also mission-critical to address the preferences of younger generations. For instance, a [study of over 1,000 Americans](#) found that 81% of Gen Z appreciated personalized ads, compared to much lower percentages among Baby Boomers.



Outlook

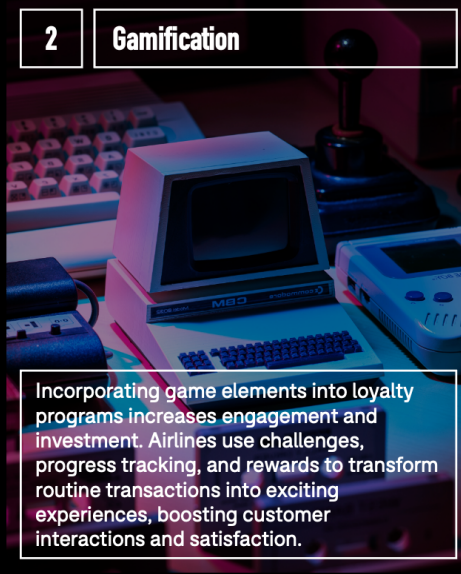
Three high-level objectives to reinvent the concept of loyalty

1 Flight Subscriptions



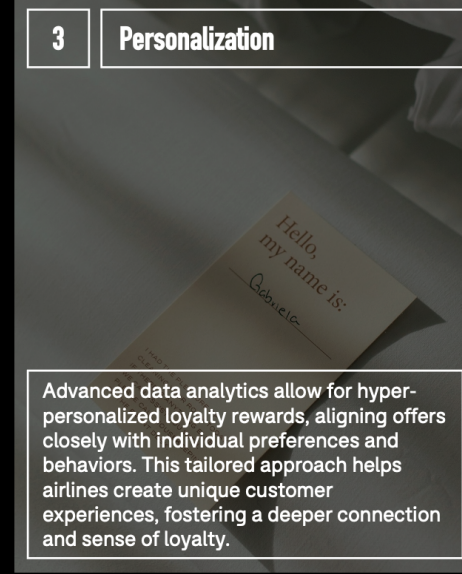
Subscription-based all-you-can-fly programs encourage recurring use and long-term engagement. These models shift the focus from single transactions to ongoing engagement by applying the Netflix approach to the airline context, particularly relevant for younger travelers.

2 Gamification



Incorporating game elements into loyalty programs increases engagement and investment. Airlines use challenges, progress tracking, and rewards to transform routine transactions into exciting experiences, boosting customer interactions and satisfaction.

3 Personalization



Advanced data analytics allow for hyper-personalized loyalty rewards, aligning offers closely with individual preferences and behaviors. This tailored approach helps airlines create unique customer experiences, fostering a deeper connection and sense of loyalty.

Source: OAG Analysis

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CONCRETE WAYS TO REDEFINE LOYALTY

These shortcomings highlight that merely tweaking reward programs is insufficient. Airline loyalty must evolve into fully immersive programs that engage customers more deeply with timely offers and enhanced travel experiences. While speculating about future directions can be insightful, a more practical approach is to examine the best practices currently shaping the industry.

So far, we have witnessed three fundamental approaches that are likely redefining the approach to loyalty in our industry.

1. SUBSCRIPTION MODELS

Netflix-like subscription models are becoming increasingly popular in the airline industry, representing a modern interpretation of loyalty that encourages recurring use. For example, Malaysia-based AirAsia

recently **revamped its travel subscription plan**, now offering unlimited flights within the 10 ASEAN countries. Similarly, Alaska Airlines launched an **annual flight subscription program** and recently introduced a club-style program with additional benefits for a monthly fee. Notably, Saudia, in partnership with travel-tech specialist Caravelo, **announced a new subscription product** for the Middle East. WizzAir and Caravelo have also **introduced the “Flight Pass,”** allowing subscribers two round trips per month for a monthly fee starting at \$49, which has been especially popular among Millennials, Generation X, and Gen Z travelers. These programs aim to build lifetime customer value rather than viewing each purchase as a one-off transaction.

2. GAMIFICATION

Incorporating gamification into loyalty programs is proving to be a successful strategy for many airlines. These programs often include challenges, badging, and progress

trackers that enhance digital marketing opt-ins. Mastercard, in collaboration with partner airlines, has applied **gamification to loyalty marketing**, resulting in a 10x increase in engagement, an 8x increase in incremental revenue compared to non-gamified campaigns, and a 22% increase in average basket size. Delta Airlines has been notably successful with **gamification in its SkyMiles** Program, offering mileage challenges, in-flight quizzes, and seat upgrade games that make the process of collecting points more entertaining.

Looking ahead, gamification could play a crucial role in promoting sustainability, incentivizing travelers to choose greener options, which remains a significant challenge in an industry where sustainability often causes **confusion and disillusionment**.

3. PERSONALIZATION

Mastering personalization in airline loyalty programs can significantly enhance their exclusivity and appeal. By leveraging advanced customer analytics and New Distribution Capability (**see our NDC primer**), airlines have the opportunity to create highly tailored and exclusive offers that resonate with individual preferences and behaviors.

One potential approach to heighten exclusivity in the loyalty context is through dynamic tiering and bespoke rewards. Unlike traditional programs, where tier statuses are fixed, dynamic tiering can adjust the status level based on various factors, including spending behavior, flight

frequency, and even the type of travel. For instance, an airline might offer temporary elite status enhancements for customers who increase their travel frequency within a short timeframe or during off-peak periods. Moreover, airlines can utilize data to deeply understand each customer's preferences and offer personalized rewards that feel truly exclusive. For example, instead of generic access to an airport lounge, a loyalty program could offer an exclusive one-time entry to a luxury spa or a private dining experience at the airport, tailored to the member's layover timing and personal interests.

Similarly, for a family traveling on vacation, the airline could automatically offer seat upgrades, extra baggage allowances, or even partner with local attractions to provide custom activity packages at the destination.

Additionally, by leveraging AI and machine learning, airlines can predict and preempt customer needs, offering them services before they even ask. For instance, if a traveler regularly books flights to wine regions, the airline's system could offer them exclusive tours or tasting sessions at boutique vineyards or even special cargo arrangements for transporting wine safely back home.

Through these personalized and exclusive offerings, airlines enhance the perceived value of their loyalty programs and deepen emotional connections with their customers, making each interaction feel truly unique and specially curated.

FINAL WORDS

As we bring this report to a close, our journey has covered three critical touchpoints that define the modern air travel experience.

In our analysis of flight booking, we've witnessed the profound impact of technological advancements on the way passengers plan and book their journeys. The shift towards advanced digital platforms and personalized experiences is about to reshape the booking process as airlines seek ways to provide travelers with greater convenience and flexibility.

Moving on to In-Flight Entertainment, we've delved into the transformative journey of entertainment systems onboard aircraft. From the early days of communal screens to today's personalized streaming services, technology has continuously redefined the in-flight experience. It is likely to continue doing so, offering passengers a growing portfolio of entertainment options at their (virtual) fingertips.

Lastly, our exploration of loyalty programs has shed light on the changing dynamics of customer engagement in the airline industry. Traditional loyalty models are giving way to more flexible approaches as airlines seek to deepen their connections with new generations of passengers and adapt to shifting traveler expectations.

As we reflect on these insights, it's clear that technology, innovation, and data are driving a paradigm shift in the way airlines engage with their customers. The future of air travel lies in the seamless integration of digital solutions across every aspect of the passenger journey.

This report serves as a starting point for a broader conversation about the future of the air travel experience. As the industry continues to evolve, we remain committed to uncovering new trends, challenges, and opportunities that lie ahead.

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