SUMMARY

Airlines today have a tremendous opportunity. By upgrading customer experiences to be more targeted and personalized, aviation brands can win market share, improve campaign performance, and sustainably grow revenues. The time to act is now, as consumer expectations are on the rise, and the brands that meet these expectations first will earn trust and long-term customer loyalty. In this white paper Stuart Greif, Practice Lead, Travel & Hospitality at Amperity partners with Julie Shainock, Global Leader, Travel and Transportation Industry at Microsoft, to define the path forward for airlines, exploring how to harness customer data and technology trends along with shifting consumer expectations to drive unprecedented growth.

“Data is the new electricity, but the ability to quickly ingest, reconcile, and stitch customer data into richer, more precise customer profiles has been lacking. This is due to data silos that inherently exist across the complex number of systems businesses utilize. Up to now, the way companies manage and connect customer data has been painful, costly, and resource intensive, yielding suboptimal results. Most don’t have the time, resources, or money to invest in connecting many of the data sets they already collect today, much less as new data sets, such as Voice and IoT, consistently emerge.

With the evolution of compute power and AI, we are now at a point where all this customer data can be seamlessly unified at scale on a persistent yet continuous basis, and orchestrated into systems of action with staggering speed. This creates the opportunity to drive significant revenue at much lower cost while delivering on the true personalization that customers increasingly expect and which is essential in creating real loyalty and brand love.”

Julie Shainock
Global Leader, Travel and Transportation Industry, Microsoft
Powerful Opportunities for Airlines

Now is a great time to be an airline. By adopting a new set of digital trends, there is enormous potential to attract and retain high value customers in a market where low margins, commodification, and waning loyalty mean an ongoing struggle for profits. There are three key drivers of this opportunity: shifting consumer expectations, unprecedented access to consumer data, and an explosion of advanced technologies available to marketers, analysts, and CX innovators.

CONSUMERS WANT PERSONALIZATION

First, consumers not only expect increasing degrees of personalization and but are also actively switching to the brands that do it well. Effective personalization involves relevant offers and communications based on a rich shared history, catering to each individual’s unique needs and desires across all channels - digital and physical.

According to research by the Boston Consulting Group (BCG), the 15% of brands that get personalization right over the next 5 years will capture an additional $800 billion in market share. And Accenture reported that 41% of the 25,000 consumers they surveyed abandoned brands last year because of poor personalization and lack of trust.

Forbes and Sabre put these statistics into context in *The Competitive Airline: Enabling Operations to Create the Best Customer Experience:*

“Airline travelers are the same tech savvy customers who are used to Alibaba or Amazon prompting them with personalized offers and fulfillment. They have grown accustomed to seamless journeys at their fingertips from Uber and Lyft, and people do not change their expectations when they fly.”

Boston Consulting Group goes a step further in its piece: *It’s High Time Airlines Got Personal.* Here the consulting firm drives home the message that personalization is no longer optional for airlines, but will soon become necessary for survival.

“With the wealth of consumer data at their disposal, airlines have an enormous opportunity to increase revenue by building strong customer loyalty rooted in a personalized experience… But there is a risk here as well: if airlines fail to act, deep-pocketed tech giants—which have already established strong footholds in travel—or well-funded startups may do so instead.”

More and more, personalization is a matter of ‘eat or be eaten’ for the airline industry.
UNPRECEDENTED ACCESS TO CONSUMER DATA

Second, hand-in-hand with a preference for personalized experiences, consumers are willing to share increasing amounts of information about themselves with brands. First party customer data sources for airlines include in-house reservation logs, clickstream, loyalty programs, mobile app and credit card usage, fulfillment data from online travel agencies, and more – all of which, when looked at together, paints a very rich picture of who customers are and what they want and need as travelers.

Any gaps in this understanding can be filled by 3rd party data providers and social media platforms such as Facebook, Instagram, Pinterest, Twitter, and Snapchat. These services have highly granular consumer data that is continuously tracked at the individual level. The amalgamation of all this data gives airlines the opportunity to create segments of “one” and move from channel-based marketing to people-based marketing.

MARKETING TECHNOLOGY EXPLOSION

Third, there's been an explosion in the marketing technology sector with over 5,000 providers now serving the needs of marketers. These technologies allow brands to interact with customers in nearly limitless ways across channels.

For example, imagine a repeat customer named Sami who visits the airline's site to shop for a flight. The site is personalized based on Sami's preferences and past trips. After bringing a flight to cart but not purchasing it, Sami later sees targeted social ads and receives custom price alerts via push notifications on the airline's mobile app. When the airline sends emails to Sami, it includes only offers that she values for flights to her favorite destinations. After she purchases a flight, the airline continues to enhance her experience with personalized upsell offers and pre-trip alerts on her preferred channels. All of this is possible because of the rich universe of marketing and analytics tools available today.

To summarize, using all the tools, technologies, and data at an airline's disposal, it is possible to craft highly personalized, omni-channel experiences for customers. These experiences will inspire customers to choose that airline over all others, and over time will result in a robust and highly loyal customer base that drives consistent revenue and growth. There's just one hitch.

The Hurdles to Personalization

Despite these opportunities, airlines continue to lag behind other sectors in creating seamless journeys and personalized interactions. While countless vendors enable select use cases like site personalization, email personalization, or targeted ads, none of them provide the true foundation brands need across all their personalization efforts — unified, usable customer data.
LACK OF UNIFIED CUSTOMER DATA

Due to more channels and technologies, as well as more data capture in general, huge amounts of customer data has become chronically trapped in systems throughout the modern airline data infrastructure. Boston Consulting Group writes:

“The first prerequisite is to understand each customer’s needs, wants, and experiences with the airline, which means developing complete customer profiles using data from across business units or data silos (and also potentially from partner companies).”

While the process of generating complete customer profiles might sound simple, this couldn’t be farther from the truth. Harvard Business Review zooms in on the problem:

“...But brands already have siloes of data about their consumers. Combined, this information would be enough to create the ultimate 360-degree customer profile, which would allow enhanced targeting and personalization… It may seem simple to combine these discrete data sets into one holistic customer profile, but there are major technology obstacles brands need to get past.”

Customer data unification is a specialized and ongoing process of data collection, normalization, and identity resolution that leads to rich, consistent, and actionable customer profiles. This process requires identifying and connecting transactional, clickstream, location, PII, and other relevant customer data at the individual level.

Once complete customer profiles are formed, the data must be used to fuel personalized journeys throughout the customer lifecycle. This requires not only a web of systems fully integrated with customer touchpoints, analytics and marketing systems, and customer-facing staff, but also an organization working in concert to generate compelling, seamless experiences.

TRADITIONAL APPROACHES TO DATA UNIFICATION FAIL

Many airlines have made some investments in their customer data unification and usability layer. Unifying customer data is not a new concept, but modern factors make a more modern approach a necessity.

Traditional approaches to customer data unification, such as Master Data Management or in-house customer data platforms, do not work at the speed or scale needed today. Personalization requires that trillions of records be processed rapidly and on a daily basis. In addition, setting up and maintaining these systems require tremendous effort by IT teams in the form of laborious ETL and schema mapping projects, SLAs across many systems, and 24/7 monitoring.

Finally, traditional systems were not built for marketers or operational staff, so they fail to enable seamless customer
experiences from site to email notifications to in-flight interactions. These limitations mean that airlines have a limited understanding of their customers, which holds them back from building customer experiences that deepen the customer relationship and help drive revenue growth.

A Specialized Tool for Customer Data Unification

**Customer Data Platforms (CDPs)** offer many improvements across all of these dimensions. As per Wikipedia, a Customer Data Platform (CDP) is “a marketer-managed system that creates a persistent, unified customer database that is accessible to other systems.” [This article](https://martechtoday.com/customer-data-platform-definition/) from MarTech Today specifies the defining characteristics for CDPs:

- Marketer-managed;
- Employ a unified, persistent, single database for all customer behavioral, profile and other data, from any internal or external source;
- Utilize a consistent identifier that links all of a customer’s data; and
- Are fully accessible by external systems and are structured to fully support marketers’ needs for campaign management, marketing analyses, and business intelligence.

While these characteristics are a significant improvement on conventional approaches, they are not sufficient for the needs of the modern airline. Legacy CDPs are missing key elements that enhance marketer reach and flexibility, and decrease time to value. An [Intelligent CDP](https://martechtoday.com/intelligent-cdp-definition/) has all the same characteristics as a conventional CDP. In addition, it incorporates the following three innovations:

- **Probabilistic data foundation:** for aviation brands, it’s normal for the same individual to have multiple records within and across disconnected databases and systems. These records often contain incomplete, imprecise, or contradictory data. This problem is particularly acute for the airline, where customers book via various channels, including online travel agencies, and swap between work and personal travel. As the variety of channels and sources continues to multiply, the amount, complexity, and uncertainty of the data being generated will only increase. Traditional databases were not designed for this: they cannot handle uncertainty about data or about how data is combined to provide answers. Probabilistic databases have a major advantage over their traditional counterparts: because the underlying uncertainty in the data is stored persistently within the data system itself, you are always able to leverage the data responsibly, and the entire system can adapt as new data becomes available.

- **Multiple marketer-friendly databases:** An Intelligent CDP leverages its probabilistic data foundation to create multiple marketer-friendly databases that can be used in parallel, each optimized for a unique use case. This vastly expands the universe of personalized marketing, analytics, and operational initiatives that an airline is able to implement. This also gives brands the flexibility to leverage the best databases for particular campaigns, strategies, and goals.
• **Intelligent stitching:** An Intelligent CDP uses advanced machine learning and massive computing power to resolve customer identities, with models refined and customized to ensure the best match quality for your customer data. This approach surpasses deterministic and fuzzy matching and provides unparalleled match rates at scale, even when the data systems don’t have exact linking keys.

With an Intelligent CDP, you get faster time to value, higher quality reach, and the flexibility to implement unique types of personalized marketing and analytics use cases in tandem.

**The Course Ahead**

In closing, airlines today have unparalleled opportunities to drive growth by personalizing the customer experience. This starts with the first customer touchpoints on-site or through digital ads, continues during pre-trip emails, on-board experiences, and in-airport interactions, and persists throughout the customer’s lifelong relationship with the brand.

To enable this type of ongoing customer relationship, airlines must start by investing in systems and tools to understand their customers at the individual level, and then cater to them in personalized ways across commerce, physical, and digital. Effective personalization depends on relevant, timely, and contextual customer interactions in the consumer’s channel of choice, and core to this personalization effort is the need to collect, unify, and action on customer data.

A Customer Data Platform (CDP) is essential for aviation brands to make the most of their customer data. Without a CDP – a marketer-managed system that creates a persistent, unified customer database that is accessible to other systems – knowing customers to an actionable extent is nearly impossible.

An Intelligent CDP can help marketers transform how they do marketing and deliver impressive top-line growth. Could an Intelligent CDP help transform your marketing efforts? **We invite you to reach out** so we can start the conversation.
About the Authors

STUART GREIF  
Practice Lead, Travel & Hospitality, Amperity

Stuart is passionate about helping Travel, Hospitality, Restaurant, Sports, and Retail companies better engage and serve their customers across the customer journey. He joined Amperity because he saw the unique opportunity to help companies finally unlock the full value of their customer data and use it in ways the industry only talked about for years—drive superior, truly personalized engagement AND translate that into breakthrough financial performance and business results. Happier customers, more profitable businesses, and competitive advantage.

Stuart previously served as Microsoft’s Senior Executive for Travel & Hospitality, led J.D. Power’s Global Travel & Hospitality practice and advised in Silicon Valley at the intersection of Travel & Tech after an earlier career at Accenture. Stuart is expert in using emerging tech, machine learning, and customer data to tackle old problems in new ways. Stuart also brings a unique perspective having previously led global strategy, busdev, M&A, product development, P&Ls, operations, and finance as an executive in prior roles, helping companies connect the dots strategically and operationally.

JULIE SHAINOCK  
Global Leader, Travel and Transportation Industry, Microsoft

Julie is a results driven Global Business Development Executive that is focused on delivering new technology solutions and increasing market share for the travel and transportation industry. She is now the Global Leader, Travel and Transportation Industry at Microsoft. Julie is responsible for developing Microsoft’s point of view and future strategy for success for WW Travel and Transportation industry. She has spent most of her career focusing on solutions dealing with—improving the end to end customer journey, increasing operational efficiency, and improving asset management and availability to deliver strong business outcomes.

Julie was previously the Global Director, T&T Industry Solutions for the IBM Integrated Industry Team with responsibility for the overall success of industry solutions for Global Travel & Transportation customers, driving sales results of all solutions, exceeding all goals, and delivering results with specific leadership responsibility for shaping the T&T Industry business solutions. The breadth and depth of Julie’s experience has been focused on integrating services with software solutions, and working with partners. Her deep industry relationships with clients, partners, professional associations and work groups has helped in shaping IBM’s successful and comprehensive strategies and solutions that have resonated with our leading T&T clients.

REBECCA SCULLY  
Director of Marketing, Amperity

Rebecca has built her career around disruptive machine learning-based technologies, with a focus on using data to fuel predictive applications, personalized experiences, and omni-channel marketing. Prior to her work at Amperity, Rebecca helped bring the Turi machine learning platform (Turi Create) to market. Turi was acquired in 2016 by Apple, where the platform has been adopted across the organization as the core machine learning engine for internal and customer-facing applications.
ABOUT AMPERITY

Amperity solves the customer data unification problem for some of the world’s most loved brands. Using advanced machine learning and a large-scale, distributed data infrastructure Amperity rapidly delivers complete and actionable customer data from all of a brand’s disparate data sources. By accelerating, streamlining, and maximizing customer data unification and usability, Amperity powers improved marketing performance and new customer-centric initiatives to drive top line growth.

✉️ contact@amperity.com
🌐 www.amperity.com