



# DATA-DRIVEN CUSTOMER INSIGHTS AT SUN COUNTRY AIRLINES

by Lee C. Thomas with Ravi Bapna

## An Industry Growth and Change

Throughout the 1950s and 60s, a few dozen commercial airlines operated in North America. Over the years, the number of unique liveries (insignia) seen adorning the tails of aircraft on runways began to shrink, accelerated in part by deregulation of the industry in 1978. Some companies ceased operation; others merged or were acquired.

This trend towards consolidation continued into December 2013, when American Airlines and US Airways merged, making the new American Airlines Group the largest airline in the world. The deal made media headlines for months prior to the actual merger and marked another milestone in the air travel industry's evolution.

By the time American Airlines and US Airways announced their merger, TWA, Pan American, Eastern Air Lines, and many others had already receded into history. Three big players now dominated the US market: the new American Airlines, Delta, and United Airlines. In their midst, a handful of other carriers (e.g., JetBlue, Southwest, Frontier, Virgin America) still operated, often on a much smaller scale or in a specialized niche.

Industry attention focused on the latest mega-merger well into 2014 as the two companies worked through the intricacies of combining multiple complex systems. Meanwhile, Sun Country Airlines—a unique player in the industry and tiny by comparison—confronted a very different set of challenges. With an unusual pedigree and a one-of-a-kind story, Sun Country aspired to turn its data into an asset and in turn, become a more nimble navigator in the industry.

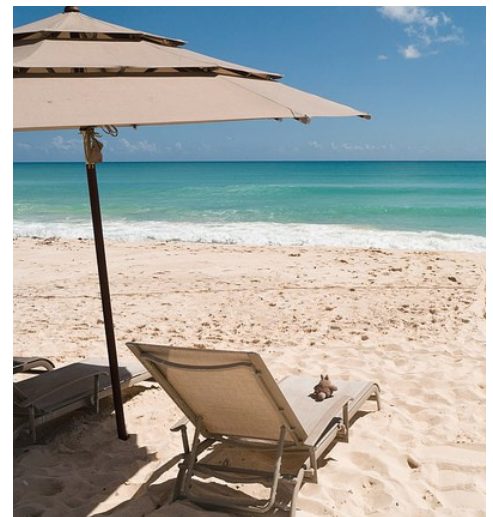
## Sun Country Takes Off in Minnesota



Sun Country started as a charter carrier in 1983. A group of pilots and flight attendants from Minneapolis-St. Paul founded Sun Country as Minnesota's "homegrown" airline offering winter-weary customers escape to sunny beaches and resorts. Sun Country later evolved to offer scheduled flight service to various destinations. In subsequent years, multiple ownership changes, two bankruptcies, and intense competition from large national brands threatened the company's very existence more than a few times. Despite the odds, Sun Country survived, even through economic recessions and industry upheaval following the events of September 11.

Although it operated in a volatile marketplace, the Sun Country brand endured. Perhaps the small carrier wasn't viewed as a threat. Perhaps other industry players shied away from Sun Country when a Ponzi scheme scandal erupted around then-owner Tom Petters. Perhaps the airline was simply overlooked. Whatever the reasons, Sun Country entered a third decade of operation as something of a rarity: an independent airline with a small fleet, serving a select roster of destinations from its Minnesota headquarters.

Sun Country became profitable in 2009. Emerging from bankruptcy following the Petters debacle, Sun Country's leaders searched for a buyer. In 2011 the Davis family closed a deal to become the company's new owners. These developments signaled a fresh start for Sun Country. The business continued to operate charter



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flights for U.S. military personnel as well as scheduled service to mostly warm-weather leisure destinations. An uptick in both hiring and revenues followed. Having survived and stabilized, Sun Country set its sights on new goals.

## Two Industry Veterans Take Stock



Michael Warnken came to Sun Country as a 25-year veteran of the travel industry. Warnken's career included many years at Northwest Airlines, another Minnesota-based carrier that later merged with Delta. He also held various roles at MLT Vacations.

At Sun Country, Warnken assumed leadership of all the company's e-commerce initiatives. Among his responsibilities were development of digital marketing and technologies to engage customers and generate revenue. This included oversight of online booking through Sun Country's consumer-facing website, third-party marketing channels, and B2B channels and partnerships with resort, tour, and hotel operators.

Another subset of employees in Warnken's group focused on the company's loyalty program, called Ufly Rewards, in an effort to build brand loyalty among travelers and win repeat business. Although not unique in the industry, Ufly Rewards was a strategic piece for a carrier so closely identified with a specific geographic market, namely the Minneapolis-St. Paul metro area.

One morning in December of 2014, Warnken sat in his office reviewing his appointment calendar. He had been in his new role for six months already, and that milestone prompted him to pause and reflect. The time had passed quickly. Since assuming the role, Warnken and his teams had improved Sun Country's booking website, upgraded some critical back-end technology systems, and revisited the mix of traditional marketing and new media the company used to attract attention in a very competitive marketplace.

All of that was good progress; however, Warnken knew there was more work to be done to make Sun Country successful and competitive in the long term.

That afternoon, Warnken met with Rosalie Vaughan, a key member of his team. A seasoned marketer like Warnken, Vaughan brought a career's worth of travel industry experience to her role as director of digital experience. She too had recently joined Sun Country when the two sat down to discuss their plans for 2015.

At the top of their list for 2015 was to develop more robust customer insights. Warnken and Vaughan agreed that this was critical to being able to advance the business. As relative newcomers to the Sun Country organization, they saw an opportunity to reset some long-held assumptions, expectations, and operational precedents that had taken hold in the company. According to Warnken, the marketing and product development teams had coalesced around what they believed to be the needs, wants, and behaviors of Sun Country's customers. However, these beliefs were based on largely anecdotal information and often inspired internal debates about what customers really wanted. Due in part to the company's tumultuous recent past, not enough time or resources had been invested in developing and validating customer profiles.

For Warnken, lack of customer knowledge significantly hampered his team's marketing and advertising efforts. He believed Sun Country needed to continue to

### TWO LEADERS AT SUN COUNTRY AIRLINES



**Michael Warnken**

*Senior Director of e-Commerce  
& General Manager, Sun Country  
Vacations*



**Rosalie Vaughan**

*Director of Customer  
Digital Experience*



develop products—vacation packages, for example—that appealed to customers on a different level. Compared to larger carriers, Sun Country was not in the best position to compete on price alone. Instead, Warnken believed that the small regional airline had to find unique ways to set itself apart from others in the industry—ways that would prove difficult to replicate for others.

Likewise, Vaughan felt strongly that the digital experience would only be improved if they knew more about the people who flew Sun Country. In particular, she wanted to make sure that online booking channels met the expectations of twenty-first century travelers. She also wanted to drive enrollment in Ufly Rewards, and she believed that better customer insights could help Sun Country to refine and market that program.

These objectives were just the beginning. Both Warnken and Vaughan knew that every modern company was, to some extent, a technology company. Data was driving more business decisions across all kinds of industries, and the airline business was certainly no exception. In order to survive into its fourth decade, Sun Country would need to amplify its use of data and analytics. Warnken and Vaughan knew this would take time and resources and the cooperation of many different people. It would likely be a long road, but they had to start somewhere.

## Starting with What's at Hand

As Warnken and Vaughan assessed their goals in light of Sun Country's current situation, they formed a plan: The first step was to identify data sources. The second step was to find people with the right skills to analyze the data.

When it came to sourcing the data, Warnken and Vaughan started with what was readily at hand. Existing data sources included the Ufly Rewards program database and TSA flight records. These sources represented 1.52 million customers making 1.86 million trips on Sun Country between January 2013 and December 2014. The transaction-level data included how and when a trip was booked, starting location and ending destination, customer demographics, loyalty program status, and more.

The second step of the plan required a bit more creativity. Given the size of the Sun Country operation, the company did not have a dedicated data analyst on staff. An HR leader told Warnken and Vaughan that even if such a position existed, it would be challenging to fill, given marketplace demand for data professionals. Despite these obstacles, Warnken and Vaughan did not want to delay the project. They believed getting started in some way would help to build momentum for the effort.

In the end, Warnken and Vaughan assigned the initial data exploration project to a team of students enrolled in the Master of Science in Business Analytics program at the Carlson School of Management. They asked the students to analyze the de-identified data and to tease out insights related to customer segments, travel patterns, and any other useful points that might be revealed. The students presented their findings at the end of a 14-week engagement.

## Case Questions



1. Imagine you are one of the Carlson School students acting as consultants to Sun Country. Using the provided data, address the following questions:
2. How usable is the data you received from the client (Sun Country)? Given the state of the data, what steps would you take to make it usable and useful—for the initial assigned project and for Sun Country longer term?
3. Based on what you see in the data, how many different ways can you view the information to paint a picture of different customer segments? Which ways offer Sun Country the most insights? How could the insights be used?
4. How would you visualize and present the insights you found for the client? What will you do in order to show Warnken and Vaughan how the insights you derived connect to their business objectives?
5. Discuss: how much power lies in simply understanding and exploring your data? Consider the downside of focusing too much on fancy models.

### ABOUT THE CASE

Developed by Professor Pavi Papna and Lee C. Thomas for the University of Minnesota, in collaboration with Michael Warnken and Rosalie Vaughan from Sun Country Airlines. Written by Lee C. Thomas.

Based on real data from Sun Country Airlines and analytics work performed by students in the Carlson Analytics Lab, part of the Master's in Business Analytics program at the University of Minnesota's Carlson School of Management.

Certain details have been modified for the purposes of the case.

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