



THE SWEET SCIENCE

BEST PRACTICES IN
LIABILITY MANAGEMENT

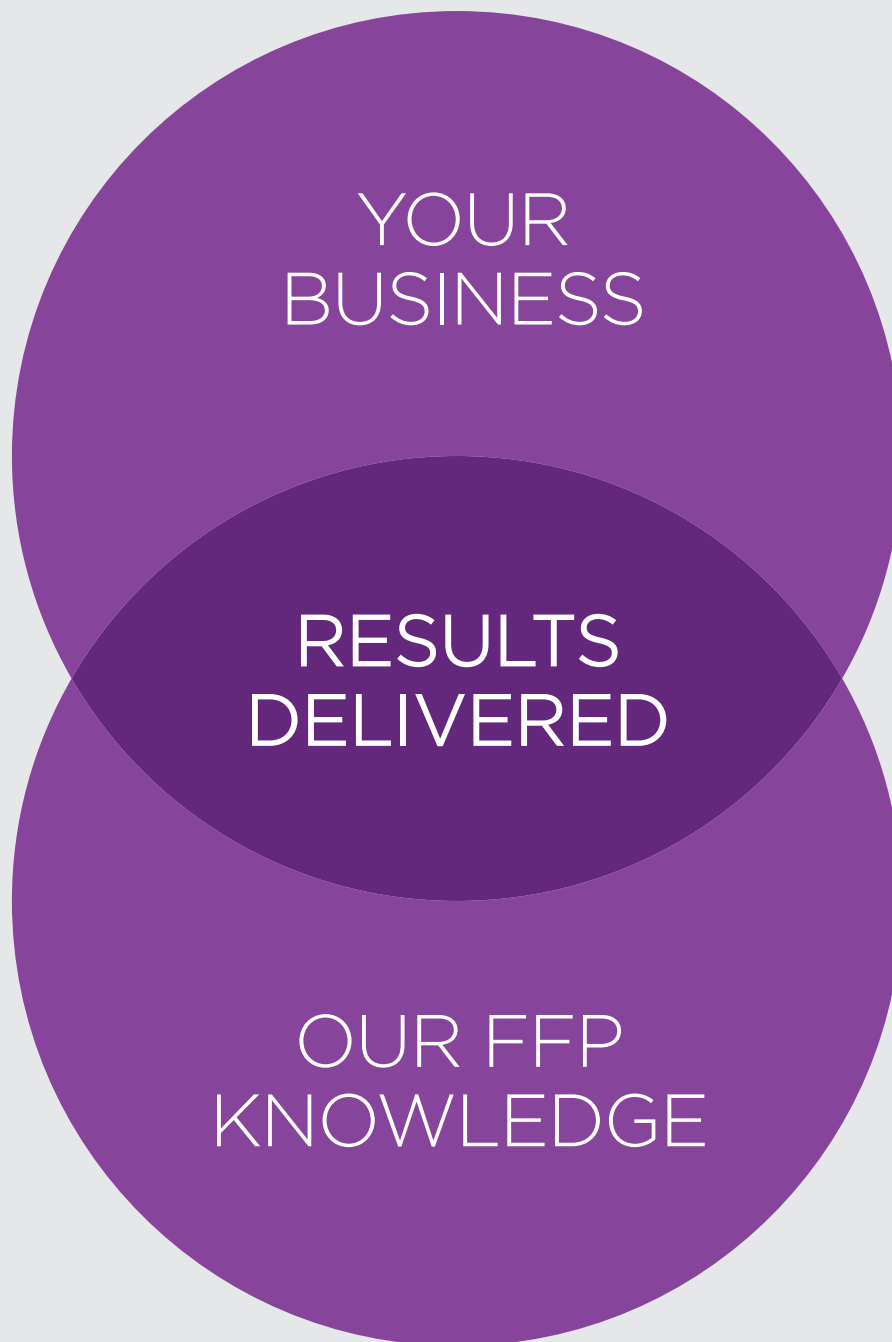
AIRLINE BRIEF

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AIMIA
INSPIRING LOYALTY



Aimia hosts a full suite of airline loyalty products and services, ranging from loyalty consulting to outsource solutions and strategic investments.

Our team of dedicated specialists helps our clients identify the core issues critical to maximizing program value. Ask us how we can help your frequent flyer program take off. **Visit us at aimia.com.**

AIMIA
INSPIRING LOYALTY

INTRODUCTION

As an element of loyalty program operations, liability management often flies below the radar. Traditionally, the cost and volume of points and miles outstanding receives the most attention from both operators and stakeholders. But successful liability management involves far more than merely calculating the amount of unredeemed promotional currency. In fact, liability management is now a bright blinking light on the radar screens of many operators and financial officers. Why the sudden prominence? Skilled program operators have learned that breakage is no longer simply a metric. Indeed, they've realized that liability management has evolved into a skilled discipline essential to their programs' health.

In the 30 years since their creation, frequent flyer programs (FFPs) have undergone myriad transformations. Operators have introduced multiple ways of collecting miles, and redemption offerings have expanded beyond travel. Co-brand credit card partnerships further expanded the number of program members into the millions, flooding the market with miles and turning frequent flyer programs into big business — in some cases, businesses more profitable than the airline's core business of flying planes.

The dramatic growth in FFPs' size and financial impact has moved breakage to the fore of program operators' concerns. Breakage — generally defined as loyalty points or miles earned but ultimately unredeemed — is a natural byproduct of most currency-based loyalty programs. Breakage can occur for reasons both systemic and endemic: miles expire, members disengage, and program terms and conditions evolve.

But identifying and quantifying the reasons for breakage has become more important than ever — particularly when the time comes to report on the program's financial performance. In addition

to its impact on the bottom line, liability management has become increasingly important to member management, business planning, and corporate strategy.

Liability management uses analytics to optimize loyalty program miles redeemed, with the goal of meeting the program host's business objectives. Liability management relies on predictive analysis to generate a continuously updated estimate of the percentage of unredeemed program currency. Aimia has identified four sets of core competencies liability managers should offer to their programs: estimation, influence, monitoring, and breakage optimization. Together, these four core skill sets provide operators with the ability to fine-tune their programs' financial performance.

Given liability management's importance in loyalty program economics, failure to understand and manage breakage bears significant financial and strategic risks. A high breakage rate might yield short-term profits, but it could irreparably harm the program's long-term viability. A low breakage rate, by contrast, may increase program costs without enhancing customer engagement.

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LIABILITY MANAGEMENT: THE SWEET SCIENCE

In 2005, *The Economist* magazine famously declared that, given the then-staggering sum of some 14 trillion unredeemed frequent flyer miles in circulation around the globe, the value of those miles was already the second largest currency in circulation behind the U.S. dollar. More recently, webflyer.com estimated the amount of unredeemed miles within all travel loyalty programs at 23.8 trillion.

Despite these truly gob-smacking numbers, liability management has historically remained something of an afterthought for operators. But time and chance happen to them all, and liability management is becoming a front-burner topic for an increasing number of airline stakeholders. Interested parties include:

“You must defer the revenue you generate from the sale of miles to your partners — money that often makes up the lion’s share of your program revenue — until the miles are either redeemed or expired. In 2007, this very rule forced Qantas to announce that its adoption cut its opening retained earnings by AUD 555 million.”

Finance Departments: In 2008, a shockwave rolled through the loyalty industry when the European Union and a dozen other countries around the world adopted new accounting rules for loyalty programs laid down by the International Financial Reporting Interpretations Committee. Under IFRIC 13 standards, program operators in International Financial Reporting Standards compliant countries had to change how they account for outstanding points and miles on their balance sheets. Under these new rules, operators must record the fair market value of unredeemed currency as liability, rather than the incremental cost of the reward to the airline.¹

This simple change can cause the liability on your books to double overnight. You must defer the revenue you generate from the sale of miles to your partners — money that often makes up the lion’s share of your program revenue — until the miles are redeemed. In 2007, this very rule forced Qantas to announce that its adoption cut its opening retained earnings by AUD \$555 million.²

These changes have opened the eyes of airline CFOs around the world. They recoil from liability materializing on their books with horror, and then turn to the sweet science of liability management. With millions of dollars of liability at stake, they understand that even small changes in member behavior can cause wild swings on an airline’s balance sheet. Finance has no choice but to take these swings seriously.

Shareholders: Financial markets are wary of breakage estimates that result in earnings volatility within publicly traded companies. For FFPs operating within airlines, breakage impacts both liability value and consolidated airline profitability. Spinoff FFPs use segment reporting, which provides a clearer picture of

both airline and FFP performance. Given that airlines must now immediately recognize changes to these estimates in their earnings, markets expect airlines to accurately predict breakage rate trends. As FFPs evolve from marketing cost to profit centers, operators have learned to manage breakage proactively and tie this activity to overall financial planning.

Marketing and Communications:

Marketers now have access to sophisticated tools that help them analyze large quantities of transactional data. As a result, liability management insights now influence more than financial activities; they guide marketing, rewards management, and even sales. The relationship between breakage and customer loyalty is therefore more clear than ever — and digging deeper into the data can help you assess the impact of program changes and marketing tactics on your members’ long-term profitability.

Partners: Current and future program partners increasingly realize that some of the miles they buy will never be redeemed. This realization begs the question: “Why should I pay you for miles that will never be used?” Understanding breakage on a per-partner basis helps determine the right price for them to pay for a mile.

As FFPs have matured, program operators have learned to balance these competing stakeholder interests. When Finance pushes for profitability while Marketing stresses member engagement, how can a program operator bring these conflicting objectives into harmony? Liability management can help warring departments find common ground — even when their objectives are diametrically opposed. Finding equilibrium between competing short- and long-term objectives is the ultimate purpose of the sweet science of liability management.

¹ Under US GAAP, alternative options exist to treat the liability.

² Qantas Consolidated Interim Financial Report for the half-year ending 31 December 2007.

COMPONENTS OF LIABILITY MANAGEMENT

Liability management is both a science and an art. It's a science in that the discipline is built on a foundation of strong analytical skill and rigorous financial modeling. It's an art in that talented analysts learn to temper their analysis with experience in strategy, program design, member marketing, and organizational effectiveness. Here's a closer look at the four fundamental components of disciplined liability management:



ESTIMATE

The ability to produce accurate and timely breakage estimates is essential for both you and your company's financial reporting. Understanding the sensitivities of the underlying model and its ability to determine why, and by how much, breakage is likely to change is essential to assessing risk and providing guidance to your company's management. Don't restrict breakage estimates to the overall program level — for best practice, you'll need to understand the implications of discrete program changes to breakage.

OPTIMIZE

Once you've confidently established your likely breakage rate, your next task is to determine whether that rate will help or hinder your company's strategic objectives. Optimization is the core of successful liability management, for it's here that you'll balance program revenue against member engagement, and short-term profitability against long-term financial health.

INFLUENCE

Once you've established your optimal breakage rate, your next step is to engage the levers of breakage influence to stabilize or steer breakage toward that goal. By identifying the drivers of breakage and learning their sensitivities, you can recommend and implement the specific policies and tactics you need to proactively influence breakage.

MONITOR

Tracking breakage leading indicators is as important as monitoring actual breakage; simple metrics that you can regularly produce and analyze often offer the greatest value. Often, these metrics are linked to annual spot indicators such as in-year burn and annual burn/earn ratio.

UNDERSTANDING DRIVERS OF BREAKAGE

Breakage is a complex issue. Because many companies take a forward-looking view on breakage, uncertainty abounds as predictions based on historical data break down as the view shifts from short to long term. The results of actions taken today to manage breakage often only manifest themselves years down the road, and the myriad factors that influence breakage make analysis a challenge. If liability management were easy, then most companies would have mastered it long ago.

Producing an accurate breakage prediction requires a good understanding of its drivers. In its simplest terms, breakage drivers fall into four primary categories: earn drivers, burn drivers, compound drivers, and expiry. Here's a brief look at each category:

> **Earn drivers:** A long list of factors influence how FFP members earn program currency. Some of these factors derive directly from the program mechanics: yield strategy, brand equity, and member engagement, for example. Other drivers are more tangential to the program, such as economic fluctuations, or sudden drops in consumer travel due to health or safety concerns. A program's range of partners, along with the associated accrual structure, also play important roles in earning; in many programs, members earn a meaningful portion of miles with partners other than the airline.

> **Burn drivers:** As with the earn side of the equation, redemption quantities depend on a long list of factors. Fortunately, more of these factors lie within marketers' control. Prominent among them are: the rewards grid, or the number of points or miles required for an award; rewards liquidity, such as members' ability to pool or transfer currency; rewards flexibility, such as members' ability to combine cash with FFP currency for redemptions; and reward availability, such as the ease or difficulty with which members can book a reward seat. Even the mechanics of the redemption process itself can play an important role in burn activity.

> **Compound drivers:** Some breakage factors are a combination of both earn and burn influencers. The most important factor in this category is the membership mix: Loyalty programs typically combine a larger high-breakage population of low-earn, low-engagement members with a smaller low-breakage population of high-earn, high-engagement members. Other factors, including the macroeconomic climate and the effects of reward-seat inventory, can also drive breakage rates.

> **Expiry:** In 1988, United Airlines became the first airline to introduce mileage expiry into its program's terms and conditions. Today, most FFP programs³ have some form of currency expiry in place. Identifying the right mechanism to determine expiry terms is critical, as the wrong expiry policy can flatline member engagement. Identifying the right expiry policy is, however, a complex task. If the policy doesn't allow members enough time to earn a compelling reward, for example, members will defect. Even seemingly simple policy changes can adversely affect member equity — and therefore program profitability — if the expiry mechanism is not appropriate for a given program. Ill-conceived expiry policy changes can even transform your membership mix — so never take policy changes lightly.

Finally, remember that none of these breakage drivers operate in isolation: It is the sum total of these drivers, working either in harmony or in conflict, that will influence your breakage rate. Breakage is a dynamic, living component of your company's financial health. Program operators must therefore give it all the care and attention it deserves.

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³ The Delta Air Lines SkyMiles program, which eliminated its expiry policy in early 2011 (previously it had a 24-month inactivity policy), is a notable exception.

TYPES OF EXPIRY

ACTIVITY-BASED

Miles are valid as long as the member makes at least one eligible transaction per set period. Activity-based expiration is the most common expiry policy for FFPs.

DATE-STAMPED

Unused miles expire after a set amount of time (e.g. a 24-month period) following the date of accrual.

FIXED

Unused miles expire at the end of a period during which they are earned (e.g. at the end of the year).

BEYOND THE SPREADSHEET

Sophisticated practitioners become de facto combinations of change management consultants and chief customer officers who embed liability management data inside the business to arm each unit with the knowledge and skills required to maintain the sweet spot between bottom-line profit and customer loyalty.

While managing the evolution from simple breakage reporting to dynamic liability management may seem like a daunting task, the first, simple steps are often the most effective. Here are a few places to seed liability management insights into day-to-day business operations:

- > **Business Planning:** Given the importance of managing breakage for your company's current and future profitability, liability management insights offer clear benefits to your business planning cycle. Bottom-up forecasts from your liability management team can complement top-down business forecasts. By running proposed changes through your breakage model, the risks associated with your plans will become clear, as you recognize the impact to your breakage rates early enough to make adjustments. For example, introducing a new earn partner that targets existing low-breakage members may be a boon to top-line revenue, but may ultimately put pressure on your breakage rate. Use the long-term lens of breakage forecasting to bring long-haul profitability into focus.
- > **Strategy:** A loyalty program is a dynamic ecosystem influenced by a variety of environmental factors, including member' price elasticity, economic conditions, available seat miles, and revenue passenger miles. Accrual feeds miles into the system, while redemption and expiry remove them. But the wide spectrum of

member behavior between accrual and redemption often leaves business units with conflicting objectives regarding liability-based insights. In these cases, your liability management team must often take on the role of arbiter, providing a holistic program view that reveals heretofore hidden relationships and opportunities to your strategy team.

- > **Member Management:** Liability management provides a fount of behavioural insight that can form the foundation for more efficient member marketing. Breakage insights can help craft more relevant communications, more granular acquisition targets, and even more insightful churn predictions.

Many loyalty program operators define outstanding liability as the future cost of rewards, net of breakage. But liability management is also key to understanding future consumption behavior — and these insights can result in increased program revenue.

To fully embed liability management insights into your business, you must understand the various components of breakage as an integrated system. Whether you operate your program as a standalone entity to maximize profitability, or embed it within a larger unit designed to maximize revenue, liability management can be the difference between success and failure.

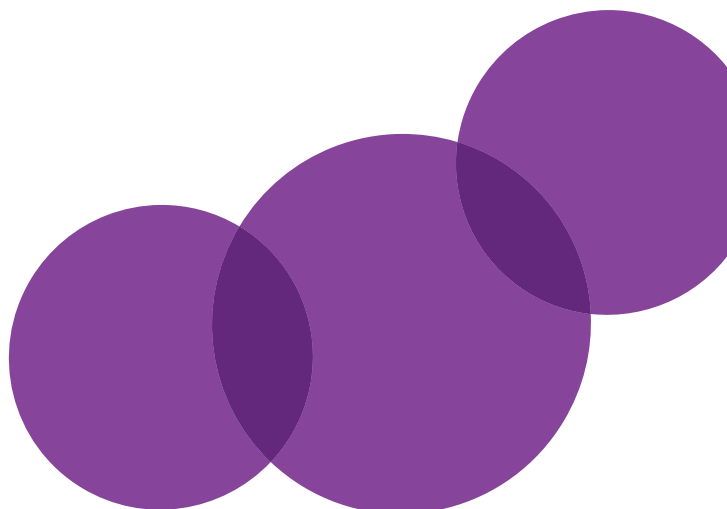
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CAPABILITIES ASSESSMENT

We've compiled a list of key questions designed to help you understand, and generate an honest assessment of, your organization's ability to effectively manage loyalty program liability.

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|--|---|
| 1 What is your comfort level with your current breakage estimate? | 6 How do your liability managers interact with other program departments? Is there a solid bridge between finance and marketing? |
| 2 Under what accounting standard do you operate? If you abide by the International Financial Reporting Standards, do you account for liability at fair value? | 7 Can you demonstrate how different member segments contribute to program profitability? |
| 3 Do you update your breakage rate regularly? Can you account for any changes? | 8 Do you understand the impact of program components on breakage? Do you communicate this impact to your commercial teams? To senior management? |
| 4 Do you know the financial and commercial impact of a one percent change in breakage? | 9 Do you have a review process for business initiatives that may impact breakage? |
| 5 Do you use a breakage and liability management scorecard? If so, what performance metrics do you include? | 10 Do you consider the trade-offs between long-term profitability and short-term breakage impacts? |
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If you fall short on more than a few of these considerations, consider seeking expert help. Even the most sophisticated operators built up their liability management capability over time — we all have to learn to walk before we can run.



CONCLUSION

Like all complex ecosystems, loyalty programs must evolve or perish. Member benefits change over time, economic imperatives intrude on program engagement goals, and operators are always forced to tighten their belts and scale back on initiatives designed to increase customer loyalty. Without liability management imbedded in your organization, you run the risk of generating short-term financial results at the expense of long-term program health. Left untreated, breakage problems can metastasize inside your program, eroding both member engagement and financial health, until the problems become terminal and your program, if not your business itself, finally succumbs. Smart operators know that regular checkups are the key to long life.

On the surface, the modern frequent flyer program is a relatively straightforward business model, and many operators today run efficient, effective programs that deliver on their promise to both customers and stakeholders. Still, it's important to remember that loyalty programs differ from traditional business operations in two important ways.

First, for FFPs, program revenue doesn't equate to sales, because program operators can't immediately recognize the proceeds from selling miles to partners. Second, there is a disconnect between program partners, who pay for miles, and program members, who earn and redeem them. The contentious relationship between these two constituencies results in a uniquely complex web of profitability drivers. In this context, liability management plays an essential role in connecting these drivers in order to find common ground.

Earlier in this paper, we identified

the four key components of successful liability management — but there is a fifth component, not readily recognized as such, but equally important. It's the vision: the drive, the confidence, and the skill to articulate the importance of breakage and liability management throughout the organization. The ability to turn an abstract phenomenon into a widely understood and supported business metric may be the most critical component of all.

Ultimately, the value of liability management depends on how well you communicate this vision to your stakeholders. Articulate the importance of finding and nurturing the sweet spot — that magical spot on the balance sheet where program members enjoy benefits that increase their loyalty, partners enjoy the fruits of their mileage investment, and shareholders enjoy profitable returns. It's a model that everyone can get behind.



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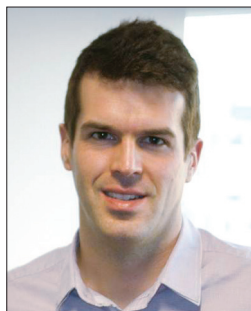
ABOUT THE AUTHORS



Evert de Boer — General Manager, Global Business Development — Travel

Evert de Boer supports Aimia's global business development efforts in travel. With more than 12 years of extensive experience in airline loyalty programs, Evert enjoys a unique view of the challenges facing airlines today. Evert started his career at KLM Royal Dutch Airlines in the Netherlands. After crossing from the client side to agency side in 2002, he continued to work on airline CRM solutions for a wide range

of clients. Evert has been a guest speaker at numerous events and institutions, and has published a number of articles on FFPs and travel loyalty. Evert earned a Master of Science degree in International Business Administration at the University of Maastricht, the Netherlands and Universidad Carlos III de Madrid, Spain. He is also a graduate of the Berkeley-Nanyang Advanced Management Program from the Haas School of Business at University of California at Berkeley, and Nanyang Business School at Nanyang Technological University, Singapore.



Jon Hendriks — Manager, Liability Management

Jon Hendriks has 10 years of experience in market analysis and quantitative modeling in the consulting and financial services industries. He joined Aimia's liability management team in 2011 and has since managed liability for Aimia's internal programs and delivered third-party liability management mandates. Developing a keen interest in the social sciences at an early age, Jon chose to focus his studies on economics and statistics, and went to work in the financial services industry as a financial

analyst specializing in quantitative trading. Next, Jon worked at the CPP Investment Board in the portfolio design group, which is responsible for setting the fund's broad asset allocation. In 2008, Jon left the world of finance to work in business consulting, and is excited to be applying his skills to the dynamic field of loyalty management, which combines his interest in the behavioural sciences with his experience in quantitative modeling. Jon holds an Honours Bachelor's degree in Economics from Huron College at the University of Western Ontario, and a Master's degree in Economics from the University of Toronto.



Gillian Mann — General Manager, Liability Management

Gillian Mann has 15 years of experience in both the airline and loyalty industries. Gillian currently leads Aimia's Liability Management team, and has developed Aimia's liability management capabilities over the last five years. She ensures integration of liability management into the strategic and operational management of Aimia's own programs, researches and develops predictive breakage models and applications, liaises with Aimia's Finance teams for financial reporting and audits, and delivers third-party liability management mandates. Prior to joining Aimia in 2007, Gillian spent 10 years with

Air Canada, where she held various positions in Operations Research and Six Sigma. As a Senior Operations Research analyst, she developed quantitative models to support business decisions across the airline business, including Marketing, FFP, Customer Service, Technical Services and Airport Operations. Gillian also provided critical leadership in both the launch and management of Air Canada's Six Sigma program, including training and driving the methodology across multiple airline business functions. Her drive, dedication and motivation earned her Air Canada's Award of Excellence. She holds both a Bachelor and Master degree in Applied Mathematics from McGill University in Montreal, and is a Six Sigma Master Black Belt.

About Aimia



Our Company: We are a global leader in loyalty management. Our unique capabilities include proven expertise in building proprietary loyalty strategies, launching and managing coalition loyalty programs, creating value through loyalty analytics and driving innovation in the emerging digital and mobile spaces. We build and run loyalty programs for ourselves and for some of the world's best brands. Customer data is at the heart of everything we do. We are Aimia. We inspire employee, channel and customer loyalty.

Visit us at aimia.com/airlineloyalty.

SAMPLE OUR BRAIN FOOD

Sample some of our airline thought leadership at aimia.com/airlineloyalty



FLIGHT PLANS FOR SUCCESS

By Sandra Diem, Vice President, Global Business Development — Travel, and Evert de Boer, General Manager, Global Business Development — Travel

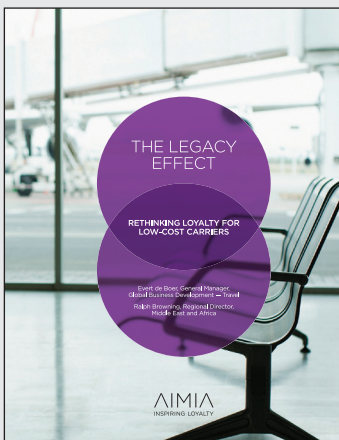
Our clients span a wide variety of airlines, ranging from low-cost carriers to large flag carriers. In this piece, learn how Aimia has helped other airlines build loyalty.



TAKING CLUB PREMIER TO NEW HEIGHTS

By Sandra Diem, Vice President, Global Business Development — Travel, and Evert de Boer, General Manager, Global Business Development — Travel

In this case study you will learn how Aimia helped Aeromexico optimize its loyalty program.



THE LEGACY EFFECT

By Evert de Boer, General Manager, Global Business Development — Travel, and Ralph Browning, Regional Director, Middle East and Africa

This paper reviews the various FFP models available for low-cost carriers and identifies their potential sources of value.