

# Airfare Shopping Analysis

4 Step Process to Delivering the  
Lowest Available Fares

Research by: Topaz International

**Sabre** / *Travel  
Network*®

## Table of Contents

Contents		List of Figures	
<b>Introduction</b>	<b>3</b>	<b>Figure 1</b>	<b>7</b>
		Sabre vs. other GDS	
		Win/Loss Ratios - Global	
<b>Step 1 – Identifying the universe of potential, logical flight options</b>	<b>4</b>	<b>Figure 2</b>	<b>7</b>
		Sabre vs. other GDS	
		Head-to-Head	
		Win/Loss Ratio -North America	
<b>Step 2 – Filter out flights with no low fare seats</b>	<b>4</b>	<b>Figure 3</b>	<b>8</b>
		Sabre vs. other GDS	
		Head-to-Head	
		Win/Loss Ratio - EMEA	
<b>Step 3 – Zeroing in on the flight options most likely to provide the lowest available fares</b>	<b>5</b>	<b>Figure 4</b>	<b>8</b>
		Sabre vs. other GDS	
		Head-to-Head	
		Win/Loss Ratio - Asia - Pacific	
<b>Step 4 – Confirm pricing and availability to present the best available low fare options</b>	<b>5</b>	<b>Figure 5</b>	<b>9</b>
		Sabre vs. other GDS	
		Head-to-Head	
		Win/Loss Ratio - Latin America	
<b>Summary</b>	<b>6</b>	<b>Figure 6</b>	<b>9</b>
		Average Savings by Region	

## Introduction

Considering the current instability of the airline industry, announced capacity reductions and the rising price of jet fuel, business travelers should expect to see unit air travel costs continue to rise. Many corporations are already feeling the ramifications of these issues on their budgets and are forced to make costly tradeoffs, potentially harming other sectors of their business. But business travelers will continue to fly as long as we live in a global economy. In an age of constantly rising travel costs, corporate travel managers must focus their efforts on implementing as many cost-reducing processes and systems as possible.

Topaz International is an airfare auditing, benchmarking, and statistical information firm specializing in the use of knowledge and technology to reduce travel costs for business and travel agents worldwide. In 2008, Topaz conducted its own real-time low-fare shopping comparison of the top GDS suppliers from around the world. This study confirms that the *Sabre* GDS delivers the lowest fares significantly more often than Amadeus and Travelport. *Sabre's* world-class team of Operations Research PhDs pioneered the field of airline revenue management. It's these scientists who designed the systems used by many airlines around the world. This experience gives *Sabre* unrivaled insight on how to

navigate a near infinite set of possibilities to find the lowest available fares. With this insight, *Sabre* has developed patented algorithms for their exclusive use.

From the technology, experience and knowledge gained from processing more shopping transactions daily than any other system comes a 4-step shopping process to consistently find the lowest available fares for each travel request. This white paper explains how *Sabre* has raised the bar on low-fare shopping best practices by detailing each of the four steps. Only *Sabre* has the combination of technology, expertise, intelligent systems, transaction volume and exclusive algorithms to deliver the lowest fares most consistently.

All of this technology and experience combines to execute a 4-step shopping process for each travel request. This white paper explains how *Sabre* has raised the bar on low-fare shopping best practices by detailing each of the four steps. Only *Sabre* has the combination of technology, expertise, intelligent systems, transaction volume and exclusive algorithms to deliver the lowest fares most consistently.

## The *Sabre* Four Step Low-Fare Search Process

### Step 1: Identifying the universe of potential, logical flight options

- The process commences with a uniquely developed, patent-pending algorithm that mathematically constructs all logical flight options for the requested origin and destination (O&D), taking into account non-stop, direct and connecting routes, interline itineraries and even alternate airports. This process ensures the *Sabre* air shopping system identifies the greatest number of routes and connections for the desired O&D, while disregarding the itineraries that wouldn't logically be feasible (e.g. NYC to LON via LAX). The result from identifying additional relevant flight possibilities is the greater probability of receiving a significantly lower airfare.

### Step 2: Filter out flights with no low fare seats

- The universe of possibilities for many O&Ds is nearly endless so to price and confirm true availability for every combination is not feasible. In actuality, a computation of that magnitude could theoretically take hours to complete and would place significant stress on major airline systems from the incessant queries that would result.
- In order to narrow down the universe of options, the *Sabre* system deploys proprietary algorithms and new generation "availability caching" technology to identify the flights across the possible routings which are likely to have seats available in low fare inventory buckets at the time of the request. The *Sabre* system is so advanced that with each and every search it literally grows smarter. Due to the sheer size of the network and the

volume of transactions processed – up to 1 million every minute across agency, consumer and corporate users around the world – the *Sabre* system is able to construct a superior view of which flights most likely have seats available in low fare inventory buckets.

- Approximately 85% of all bookings through the *Sabre* system are on carriers with which *Sabre* has "Direct Connect Availability" (DCA), which confirms real-time availability when a system user requests flight availability. *Sabre* complements these direct connections with continual inventory availability updates throughout the day from the other air carriers in the system. In addition, real-time availability information is gained as other *Sabre* users complete bookings and low fare shopping requests. *Sabre* users benefit from direct connections that verify real time availability at time of booking for carriers that represent over 98% of bookings through the *Sabre* system.
- *Sabre* users include a customer base of over 50,000 agencies world-wide, thousands of corporations and millions of consumers all using *Sabre*-powered online tools. The *Sabre* air shopping system intelligently incorporates the results of all these inquiries, presenting an unmatched view of inventory availability across the world's airlines and across O&Ds. A direct comparison can be made to online search engines such as Google and Yahoo: Each time a websurfer completes a search and selects a link, the site learns which web results are most relevant, ever-increasing the quality of responses. Thus, the more users a system has, the smarter it gets.

**Step 3: Zeroing in on the flight options most likely to provide the lowest available fares**

- Next, the *Sabre* GDS pinpoints the flights most likely to yield the very lowest fares. Given the vast number of flight options identified in steps 1 and 2 for many O&Ds, once again it is simply not feasible today for any system to compute every fare combination and confirm true availability across this entire selection of flights. It is therefore essential that the *Sabre* air shopping systems evaluate the largest sub-set of flights from this universe of potential options, and to do so with intelligence to most accurately select the flights which have the greatest likelihood of providing the lowest possible fare combinations. The *Sabre* system accomplishes this through a combination of new open systems air shopping technology (to efficiently process the largest sub-set) and proprietary algorithms (to select the right sub-set).
- *Sabre* has a rich history of experience and innovation, most notably designing the world's first automated airline inventory and yield management systems, which continue to serve the travel industry today. It is this expertise that continues to position *Sabre's* GDS

as the leading pioneer of design and execution of low fare search algorithms. Thanks to international patents, these algorithms are exclusive to the *Sabre* GDS.

**Step 4: Confirm pricing and availability to present the best available low fare options**

- Now that *Sabre* has intelligently selected a set of flights most likely to provide the lowest available fares, real-time pricing, including tax calculations and combinability rules, identifies the set of flights offering the lowest fares. Then, in order to confirm availability, *Sabre* utilizes their real time "direct connections" from the internal reservations systems of the world's largest airlines along with the most updated view of availability on all additional carriers. *Sabre* auto-prices each itinerary with precise accuracy, guaranteeing every fare quoted.

## Summary

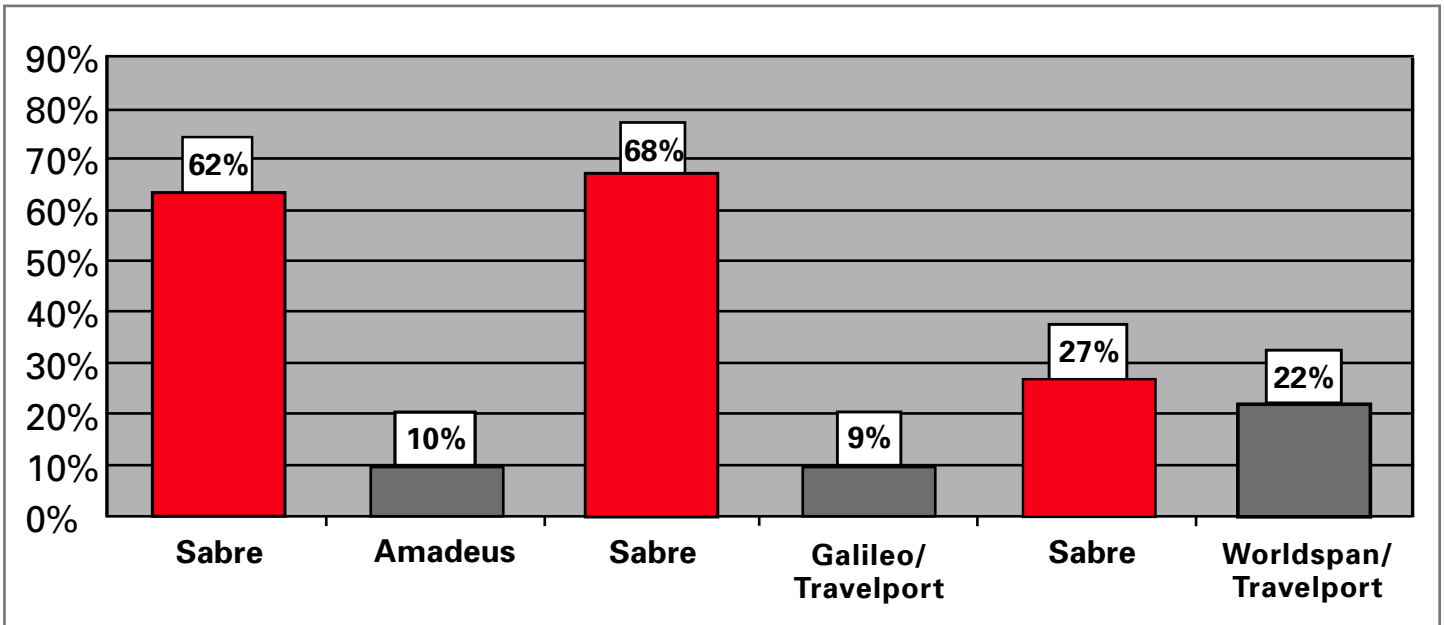
*Sabre's* four step process is a procedure that occurs within a matter of seconds, allowing *Sabre Connected*<sup>SM</sup> agencies to increase efficiency and effectiveness – and most importantly, to save travelers millions of dollars every day. Based on the results of the Topaz study, travelers around the world can save an average of 10% per ticket when booking through the *Sabre* GDS. A North American *Sabre*-powered company saves up to 12% or more based on their mix of domestic and international travel.

Considering today's world of air travel, there are many factors that can't be controlled (for example - reduced capacity, baggage fees, increasing airfares).

Naturally, airlines are taking these steps to ensure the future health of their businesses as they move forward. The Topaz results do show that there is one controllable spend for any given travel program - the GDS. The *Sabre* GDS consistently allows travel management companies and corporate travel managers to increase their productivity with limited effect on business travelers. Thanks to unrivaled technology and experience, *Sabre* customers can expect substantial bottom-line savings to destinations all across the world.

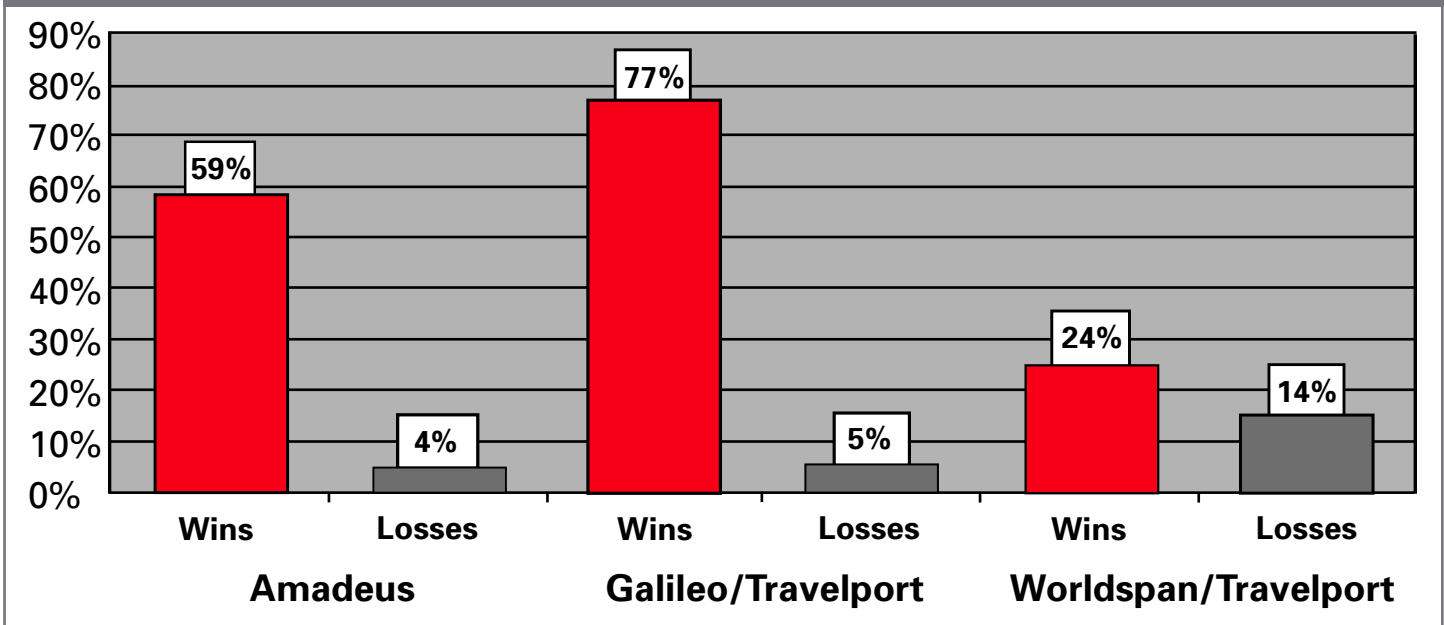
**To learn more about *Sabre* fare-shopping technology, visit:**  
[www.sabretravelnetwork.com/home/products\\_services/corporation/sabre\\_gds/](http://www.sabretravelnetwork.com/home/products_services/corporation/sabre_gds/)

Sabre vs Other GDS Global Win/Loss Ratios



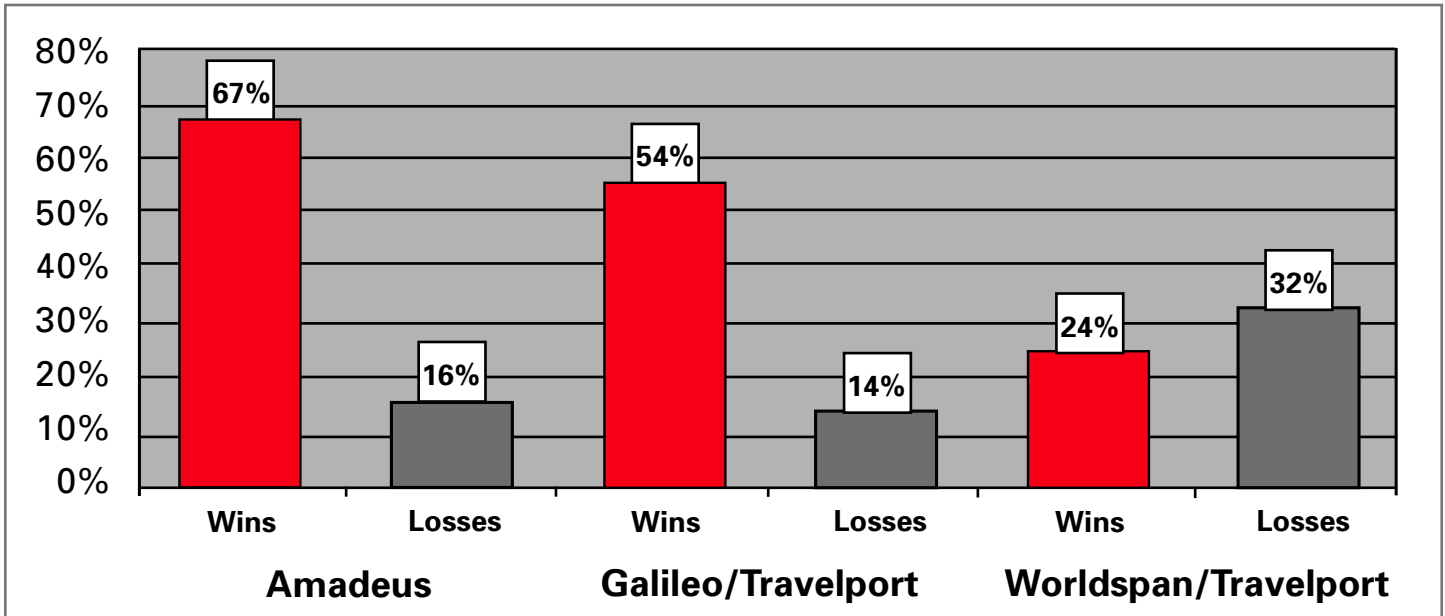
**Figure 1** This graph portrays, on a global scale, the performance of the Sabre GDS in comparison to its three main competitor GDSs in finding the lowest fare on a percentage basis. In the case of Galileo, Sabre found a lower international airfare 68% of the time, versus Galileo's 9%.

Sabre vs Other GDS Head-to-Head Win/Loss Ratio North America



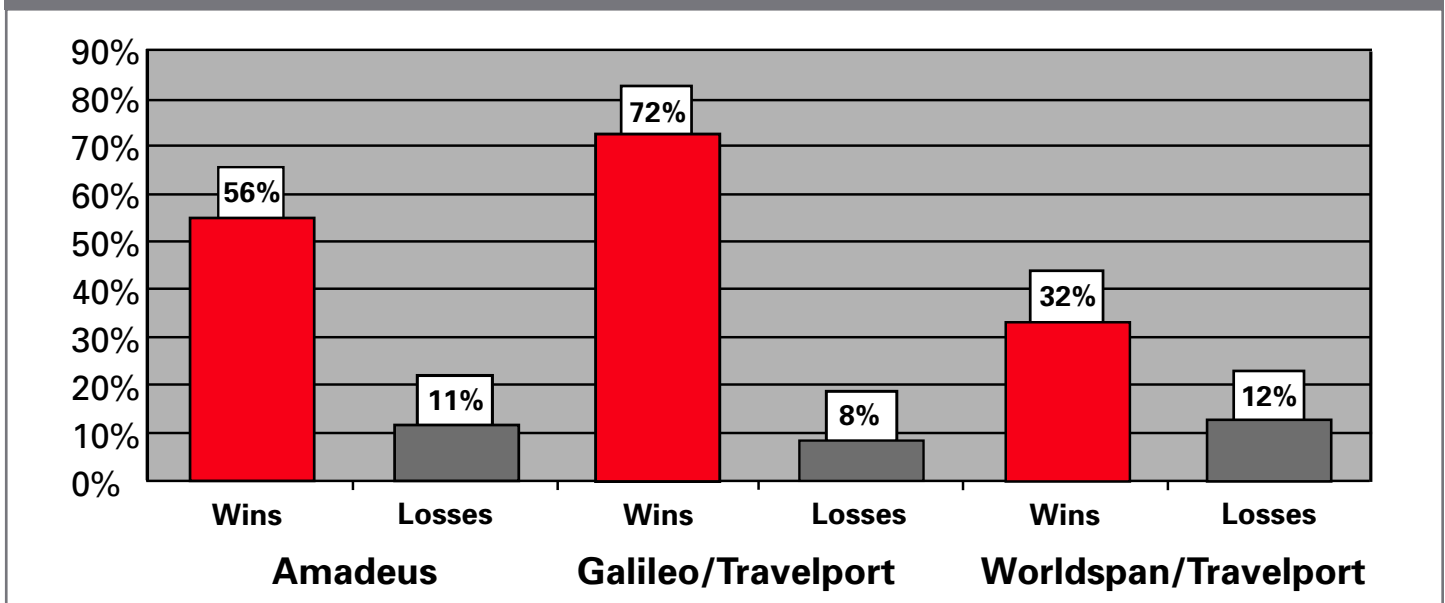
**Figure 2** This graph represents the percentage of head-to-head cases where Sabre outperformed other GDS's in locating a lower fare in the North America region. For example, Sabre beat Galileo/Travelport 77% of the time, while Amadeus found a better fare only 4% of the time.

Sabre vs. other Head-to-Head GDS Win/Loss Ratio - EMEA

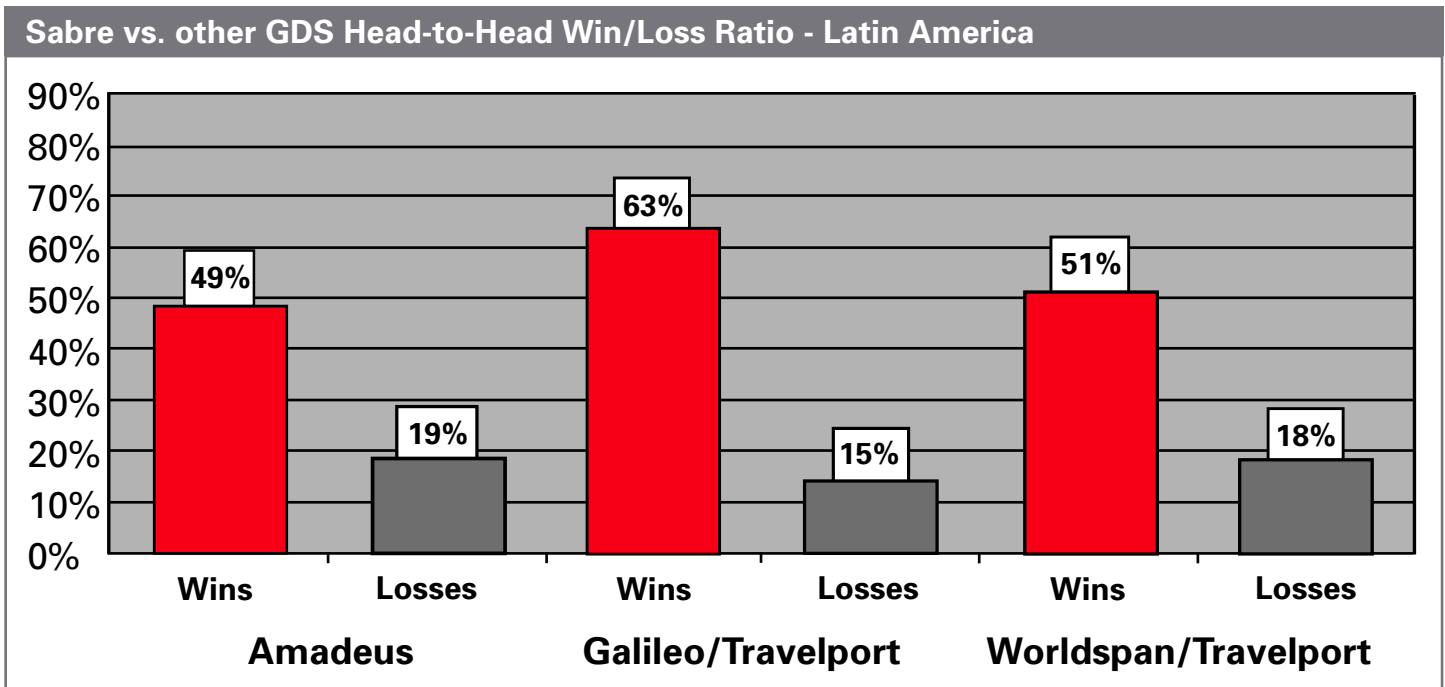


**Figure 3** This graph shows the percentage of head-to-head instances where Sabre surpassed its competitors in finding a superior fare in the Europe/Middle East/Africa regions. According to the graph, Sabre located a lower fare in 67% of the searches versus Amadeus.

Sabre vs. other Head-to-Head GDS Win/Loss Ratio - Asia - Pacific



**Figure 4** This graph demonstrates the head-to-head proportion of Sabre fare wins versus the three major competitor GDSs in the Asia-Pacific region. For instance, where Amadeus located a cheaper fare only 11% of the time, the Sabre GDS found a lower fare 56% of the time.



**Figure 5** This graph reveals the percentage of head-to-head occurrences where each competitive GDS located the least costly fare in the Latin America region. For example, the *Sabre* GDS found a lower fare in 63% of the searches, while Galileo/Travelport delivered a better fare in only 15% of the time of searches.

### Average Savings by Region

Regional O&D	Average Net Savings Per Ticket	Average % Savings Per Ticket
North America	\$50	12%
Europe/Middle East/Africa	€68	12%
Latin America	\$114	17%
Asia - Pacific	\$132	18%

**Figure 6** This chart illustrates the average net and percent savings per ticket on a *Sabre* GDS-booked air fare. The chart is broken down into the four key regions.