



# css integration

*It's a great day — all flights and airport stations are running smoothly. Our call center is within optimal call-handle times, our airport agents are processing passengers faster with automated check-in tools, and our leisure and business passengers are seeing some improvements in their travel experience. This is because*

*of the latest changes we've made to create a friendlier atmosphere from reservations to airport and on board.*

*Sometimes, however, we aren't sure we have a truly unique view of our passengers. Are we able to anticipate passenger issues, provide choices and resolve incidents in a way that turns passenger problems into customer solutions?*



*Our airline has been working diligently to make sure our operations run smoothly so our passengers enjoy their travel experience. But sometimes, it just feels like we're barely able to stay ahead. Anything out of the ordinary can significantly impact us. Today is a prime example — all things look great on the surface. But reports indicate severe weather is approaching along the coast and will affect flights at our hub. Our call center agents need to notify customers of cancelled or delayed flights; they must be re-accommodated as quickly as possible, and our agents must manage these changes quickly with minimum revenue dilution. Not having technology and business processes flexible enough to make customers feel like — well, real customers — across our enterprise shows itself when irregular operations occur.*

*To add to this, the customer reservations center manager was just notified of overbooking during the New Year's holiday season. Our agents now need to validate confirmed tickets by identifying true passenger counts versus those that are just holding reservations without payment.*

*Some of our passengers want to make their own changes using the Web. And we want to reward a high-value customer with special circumstances and can't see that profile at all system touch points. Can some of my alliance partners handle the loads if we've booked on alternative routes? How can I manage unsold inventory given these latest developments?*

*Wouldn't it be great if my passenger-based system was actually a powerful, flexible customer sales and service solution? Then, the entire internal view and external experience would be responsive in real time and integrated to identify our valuable customers and reaccommodate them efficiently, action PNRs to maintain revenue integrity and even let passengers conduct refunds and exchanges via the Web. Is this possible?*

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A good passenger experience during an operational disruption results in a satisfied customer and translates to future revenue for the airline. The revenue benefit is roughly three times the cost benefit — translating to a revenue benefit of US\$0.15 per PB.

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## The Vision

For an airline to enjoy the benefits of moving beyond solving transactional problems to creating a customer sales and service-based solution, integration across reservations, inventory control, ticketing, shopping, pricing and departure control is essential.

One of the most important actions an airline can take to maximize revenue opportunities is capture more finely detailed information on customers who have simply signed up for a frequent flyer program or have flown on the airline previously and leverage that information to make the best decisions. Electronic ticketing capabilities that exist today can be extended to include details of ancillary purchases, for example.

By collecting and continually updating customer information in a secure fashion, airlines gain insight into the customer's preferences and travel behavior. This type of data enables an airline to carefully define and segment the customer, score the customer to enable better allocation of scarce resources and deliver more consistent service levels to optimize the revenue generated by the customer. The

result is being able to target the right offer to the right customer and offer relevant additional services such as seat upgrades, ancillary product offers and special flight packages at aggressively competitive prices. The ultimate goal is to change business processes to match the customer.

And to make such an arrangement work, solution integration is paramount. Under the principles of customer sales and service, an airline should treat every customer consistently throughout its operational system by having the same real-time information available at every customer touch point.

Applying a customer sales and service approach throughout an airline's reservations and departure control "central nervous system" — including components such as core reservations, check-in, online booking engine, shopping platform, ticketing and inventory — can generate potentially substantial revenue enhancements.

With flight cancellations or overbookings, integrated business solutions provide reservation agents, CRC managers, check-in personnel or even the passenger opportunities to manage changes without diluting revenue and maintaining a consistent customer experience.

With an integrated reservations solution, an airline can economically expand distribution and sales, reduce costs and improve critical customer-facing operations. Estimated cost savings of up to 40 percent can be achieved from using a core, configurable solution to manage inventory, schedules, codeshare, shopping and reservations capabilities.

## Customer Value

Today, one of the key levers in the air-transportation industry is the effective use of inventory to control who is offered tickets at certain preferential fares and who rates as top-value customers. Inventory is an active lever to effectively ensure availability. By understanding customer value, the system can be more effective in returning availability decisions and protecting revenue.

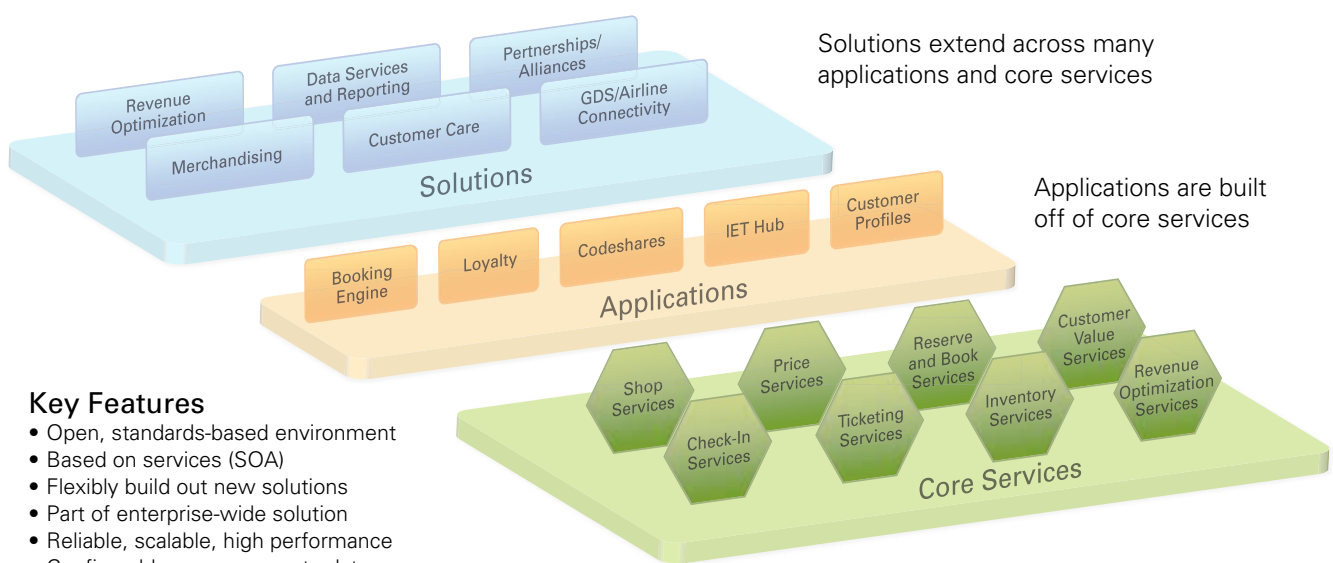
And this leads to the dynamic customer-rating technique called the customer value score. Determining customer value score is

different for every airline — because every airline has its own idea of “value” that it assigns to any individual customer.

Regardless of how the airline determines a customer’s value, that “score” must be available across multiple systems to ensure the airline has the means to deliver a consistent experience to every customer. The loyalty system, Web, reservations system, check-in system, dining and cabin, revenue management or other systems can utilize a customer value score to help make intelligent decisions in relation to a particular customer.

How can an airline calculate this score? A data warehouse containing pertinent passenger information, coupled with a configurable natural-language rules

Figure 1 CSS core services



### Key Features

- Open, standards-based environment
- Based on services (SOA)
- Flexibly build out new solutions
- Part of enterprise-wide solution
- Reliable, scalable, high performance
- Configurable, easy access to data

engine enables a “score” to be established and subsequently distributed for use. Distribution via defined services can be made available to multiple consumers using flexible services-oriented technology principles. Further, the airline has the option to build out its own business processes and still leverage common services such as the customer value score.

What do highly valued customers get from an airline? Among the things the airline may offer is checking excess luggage or compensation in the case of a bad experience. Also, the highly valued customer may be invited to join the airline’s VIP club if not already a member. Or that customer could be offered the opportunity to visit the airline’s VIP lounge during a scheduled layover at a particular airport. Delivering this kind of service to eligible customers is possible with integrated access to a customer value score and associated business rules.

A high-value customer would receive relevant offerings of enhanced or additional products to make the customer’s experience with the airline both pleasant and memorable — establishing loyalty the airline can continue to build on, to the ultimate benefit of both the airline and the customer.

## Determining Customer Value

For example, a customer who flies frequently for either business or pleasure — and who never seems to care how high a fare may be — is likely to be a highly valued customer by any airline. But what about a customer who only purchases highly discounted fares, yet flies every week? Some airlines would also value that customer highly due to frequency whether it is a leisure traveler or even a corporate account. Finally, a customer who is traveling on an airline for the first time may be highly valued.

Or what about high-profile customers — such as movie stars? Or sports celebrities? What about well-known, highly recognizable political personalities? Some airlines rate customers such as these very highly just because of the prestige their names carry.

So in addition to how often a customer flies — and the fares a customer is willing to pay — any number of other factors may also come into play when an airline sets its customer value scores. An airline’s business model and strategy in the markets it serves provide a lens for the definition of “value.”

## Evolution From Transactions To Customer Centricity

A PNR is the foundation of a transaction-based system that focuses primarily on a single trip. To make full use of the broader possibilities a true customer-sales-and-service reservations system offers, that transaction-based PNR system must be converted into a much wider and more useful customer profile-based system. The PNR remains a foundational building block, but the evolution to customer centricity rests on a complete customer profile.

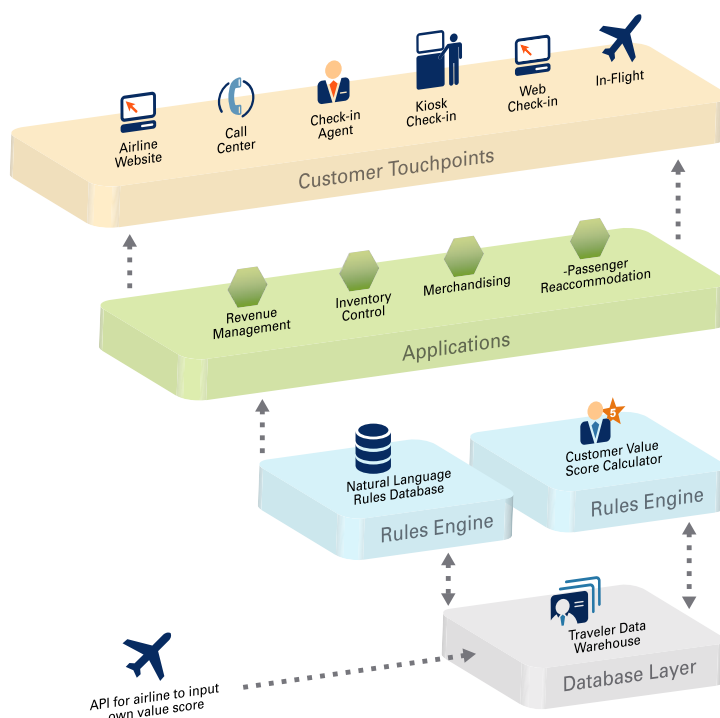
This customer-centric outlook can lead to vastly enhanced airline revenue opportunities. By gathering, retaining and analyzing customer profile data from past trips and future-booked travel, an airline can truly get to know its customer as an individual. And by knowing that individual's

preferences, the airline has a lens into the customer's travel patterns and can more logically and precisely identify what types of offers will likely appeal to the customer.

But none of these actions would be possible without integrated solutions. The airline must be able to gather, store and analyze customer profile data then distribute that information throughout the airline's network, making it available at all customer touch points on a real-time basis. Otherwise, the information would be virtually useless to translate into enhanced airline revenue.

If the customer books online, the baggage fee must be waved. If he checks in at a kiosk, the system must realize not to prompt for the baggage fee. Or if he calls an agent, she must know she should wave the fee, and perhaps even offer an apology for the lost luggage on the previous flight. All this requires tight solution integration among business services such as value score, rules, reservations, departure control, profile, ticketing and other systems.

Figure 2 CSS customer-centric plan



### Traveler Data Warehouse

- Traveler Loyalty
- Customer Insight
- Trip Record (PNR)
- Ticket Record (VCR)
- Trip History
- Service History
- Check-in Data
- Flifo Data
- Fares Data
- Baggage
- Customer Experience Manager
- SAP/ HR
- Siebel

### Key Differentiators

- It's not just completeness of data, but how you use it (natural language rules engine);
- End-to-end nature of customer touch points

## Snapshots Of Customer Centricity

### Customer Vijay Kumar

*If an airline knows that Vijay Kumar of Bangalore, India, has taken an average of a dozen business trips a year over the past seven years on the airline, that's useful information. It's even more useful if the airline notes that Vijay also travels occasionally on family trips with his wife and two school-aged children.*

*In fact, looking at Vijay's travel history, the airline can further determine that his family enjoys a once-a-year beach vacation in Thailand.*

*What if the airline were to inform Vijay of travel options at any of its high-touch (call center) or low-touch (Web booking) points of sale informing him of a family package vacation offer to Fiji? This package could be at a price comparable to what Vijay has paid previously to travel with his family to Thailand. Might this valued customer be interested in such an affordable family trip?*

*He and his family might well be interested. This is an illustration of the type of "win/win" scenario that can accompany good customer-profile analysis. The airline wins if the Kumar family makes the purchase — and Vijay wins because he and his family may never have thought they could afford to vary the location of their annual beach trip and go to Fiji instead of Thailand.*

### Customer Maria Gonzales

*Customer centricity and effective use of the customer profile to enhance airline revenues can be even simpler. For example, Maria Gonzales takes flights for either family activities or business when necessary, perhaps a total of a half-dozen times a*

*year on average. But one of the things her customer profile reveals is that she likes to upgrade her seat whenever possible.*

*By inferring customer preferences with profile data and combining this with the value score, the information is readily available to the airline's marketing staff for proactive customer engagement. Maria might be presented an online opportunity to upgrade her seat on an upcoming flight at a reasonable fee, which her history shows she is likely to accept.*

### Customer Li Mei

*What about Li Mei who flies frequently on business and pleasure to rate as one of a particular airline's highly valued customers? Unfortunately, the airline lost his luggage the last time he flew. If this information is readily available through integrated systems, Mei could receive some form of compensation for the lost luggage, which will help maintain his loyalty.*

*And if Mei is considered a truly top-value customer — having a customer value score in the airline's top 20 percent, for example — the airline might decide that from now on, he is never charged to check his luggage. These policies would be determined exclusively by the airline based on its own preferences and market strategy. To make it work effectively, the airline would need a flexible system that it can configure through natural language with minimal effort.*

*To extend this further, knowledge of travel booked for the future could enable airlines to cross-promote with destination partners for local attractions or events. Mei is that valuable a customer, and the airline appreciates his loyalty, resulting in long-term revenue preservation and lower overall cost of sales. Such an airline policy helps further cement Mei's loyalty. Keep in mind that a value score and profile can be independent of an airline's loyalty program if the airline so chooses.*



## Passenger Processing Becomes Excellent Customer Service

In an airport environment, integrated systems are essential to efficient airline operations, thereby saving substantially on airline costs and contributing to bottom-line revenues. But they also enable the airline to offer the right customers value-added services that travelers are likely to find attractive.

The routine of day-of-departure check-in is familiar to every air traveler. Recently, however, that routine check-in process has evolved into something that is much more automated, so it's much less costly to airlines.

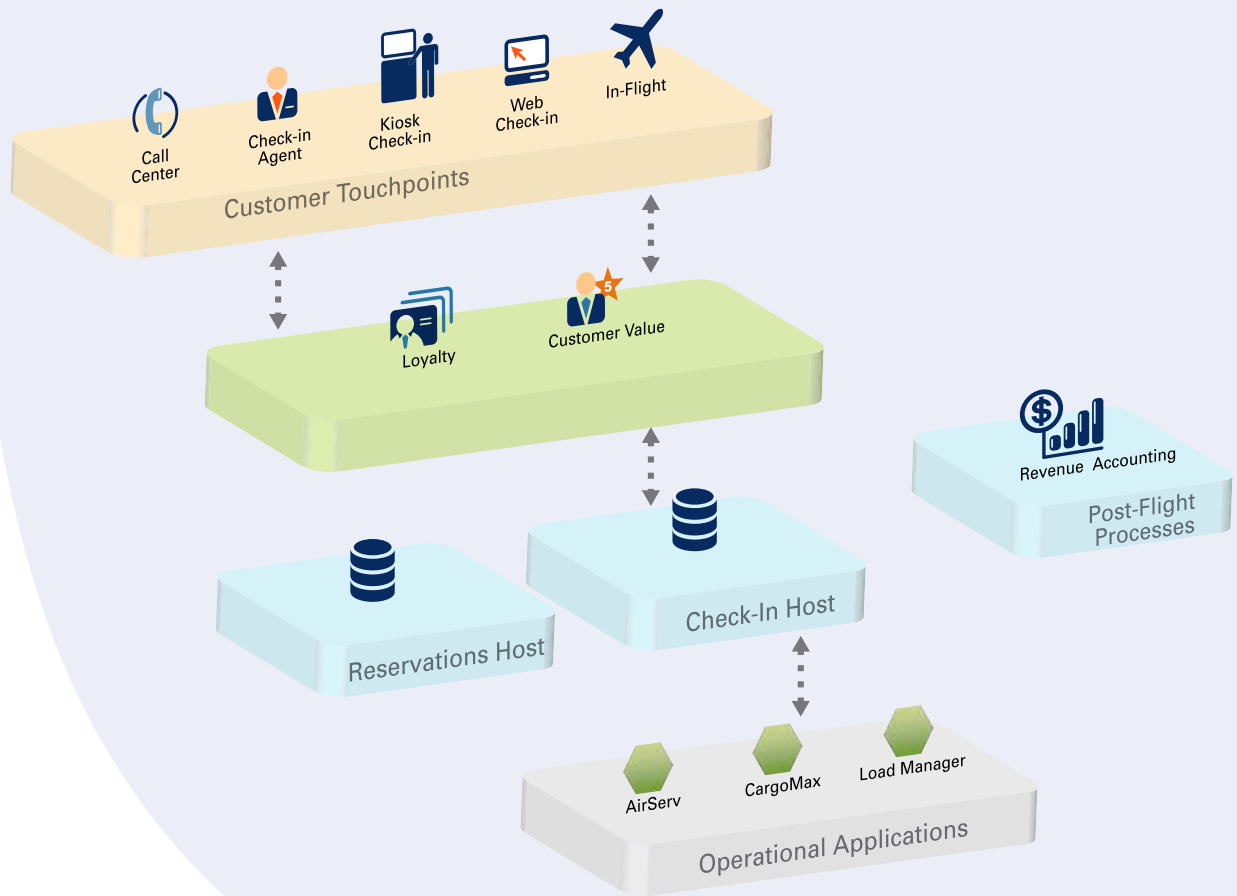
Additionally, integrated solutions are now enabling passengers to check in remotely, so customers can get ahead of the game when it comes to this process, which was formerly strictly an airport-based function.

Passengers can now check in online or through a kiosk, or they can check in using their mobile phones or other personal communications devices. By enabling these off-airport check-in options, airlines' integrated solutions are contributing significantly to bottom-line finances simply by saving much of the cost that was previously associated with airport-based check-in.

Airlines are able to efficiently redeploy airport personnel to be more productive or even reduce ticket counter space — all measures of cost containment.

Without the use of synchronized processes, the airline can run the risk of turning its valuable customer back into "just a

Figure 3 CSS check-in systems



transaction.” An airline must consider business processes that provide superior customer service balanced with efficient operations. Consider the following:

- Check-in solutions need to be closely integrated with flight-planning and flight-operating system components. Accurate tail assignment of aircraft, passenger head counts and baggage for weight-and-balance calculations prior to takeoff support efficient operations and fuel savings.
- Check-in systems must also integrate with point-of-sale applications to help the airline prompt for and complete sales transactions for ancillary services, such as seat upgrades and in-flight amenities.
- Collection of outstanding fees at all points-of-sale increases airline revenue, ensures compliance with airline policies and tightens revenue accounting.
- Finally, once a flight has closed out, there are opportunities to send post-departure data to revenue or cargo management systems for improved forecasting in future planning cycles.



## Empowering Customers And Offering Choice

Perhaps nowhere is an airline's system-integration level felt more strongly than in Web applications — enabling customers to perform more and more functions online, while directly enhancing financial performance. The Web is capable of integration across all airline systems including the airport tools, call center functionality and even for pre-paid ancillary services.

Online functionality enables customers to perform many tasks themselves that previously required, for instance, an airline

agent in a reservations center or an airline employee at the airport.

These transactions may include shopping for just the right ticket package, purchasing tickets, upgrading seats, purchasing travel extras, reserving rental cars and hotel rooms, purchasing an onboard meal, checking in for a flight, paying for luggage that is to be checked aboard a flight, and confirming gates and times.

Without integrated systems, an airline couldn't offer such a broad range of transaction possibilities to customers on its Web site.

The Web site also represents an opportunity for the airline to further differentiate its product — offering branded fares that represent different levels of service, for instance — and merchandising a number

of offerings from which the customer can choose when customizing a trip. Here is the best chance for the airline to up-sell and cross-sell items to customers through numerous value-added offerings, which a customer, at a mouse-click, can either accept or decline.

The Web provides increased efficiency and value with seamless integration of inventory, seats and fares. An airline is wise to enable customers not only to purchase tickets and ancillary services on the Web site, but also to make changes — performing refund and exchange transactions and handling loyalty club functions — on the Web, all while the airline effectively manages airport resources.

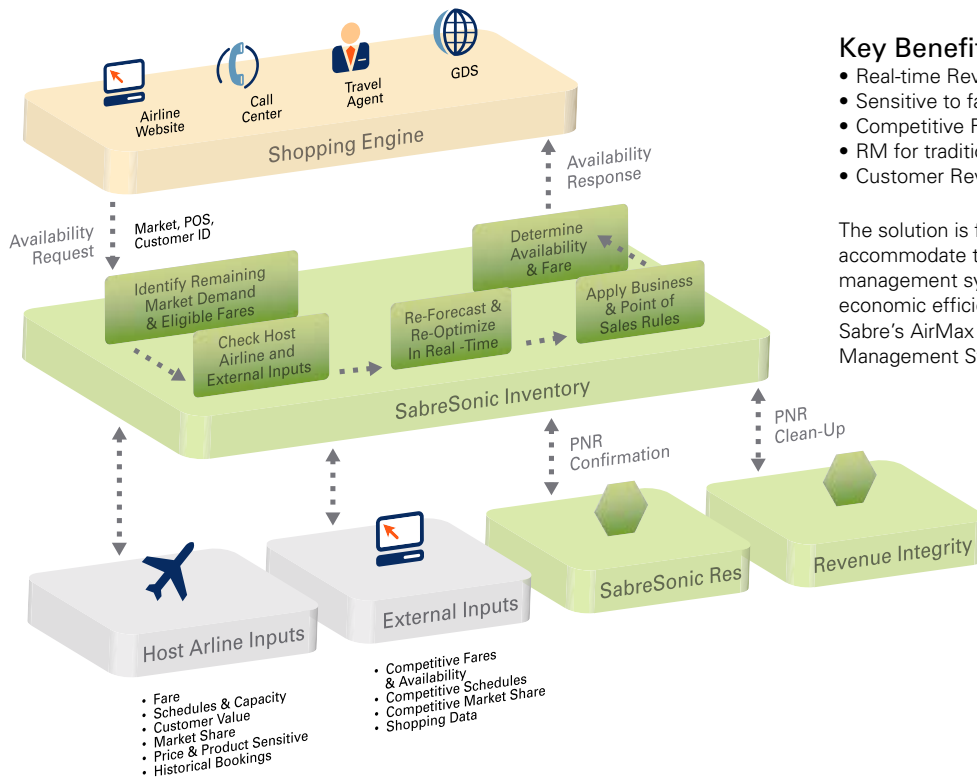
Airline content including fare families and ancillary services should be integrated with the airline's shopping engine and made available at all shopping touch points including the airline Web site, call

center and travel agencies. Coupled with the details of the customer value score, the optimal merchandising choices will be offered to a selected passenger within a particular sales channel.

The Web represents just one avenue for consistent fulfillment of these merchandising opportunities while also ensuring a seamless passenger experience. A multi-channel selling strategy optimizes incremental revenue, generating opportunities by reaching more customers while maintaining a seamless customer experience across all channels. A majority of consumers use multiple channels to purchase travel and match the channel with the type of trip they are taking.

For business travel, a customer will typically use a travel management agency, but for a family and friends leisure trip, the same customer might use an online travel agency or an airline's Web site. With the ability to integrate all touch points coupled with the power of knowing the customer and the purpose for travel, the right products and services can be offered at the right price within the appropriate channel.

Figure 4 CSS Web interfaces



**Key Benefits**

- Real-time Revenue Management
- Sensitive to fare / schedule changes
- Competitive Revenue Management
- RM for traditional and one-way fares
- Customer Revenue Management

The solution is flexible enough to accommodate third party revenue management systems. Greater economic efficiency occurs with Sabre’s AirMax Revenue Management System.

Studies have shown that real-time revenue management, applied diligently and appropriately, can positively impact an airline’s overall revenue up to 5 percent, and excellent merchandising of an airline’s products can result in a positive impact of a like amount or even more.

**Improving The Offering**

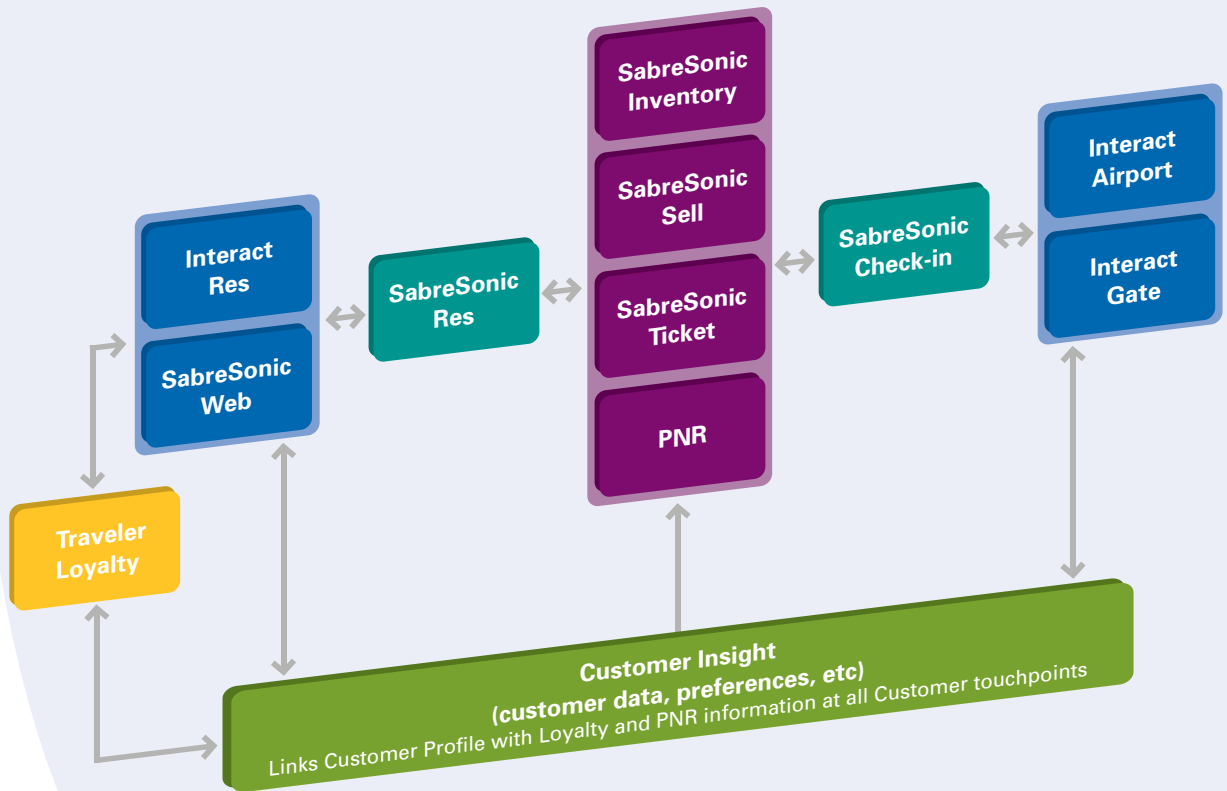
An airline’s “sell” capabilities relate directly to being able to supply up-to-the-minute information within the airline’s network at all times.

Airlines using tightly integrated inventory and revenue management systems have the unique advantage of a real-time revenue management solution, which offers the ability to provide updated optimal inventory controls in real time based on conditions in

the marketplace. An availability request can be made at any point of sale. The power of integrated solutions include:

- Identifying available inventory options using the appropriate thresholds defined by the airline. Host airline inputs such as customer value, market share, capacity or even fares will feed into this decision,
- Evaluating external factors such as competitive fares or market share,
- Enabling real-time revenue optimization,
- Applying additional business or point-of-sale rules,
- Offering a solution for the availability response.

Figure 5 Real-time revenue management



## The Benefits Of Integration

The solutions that are able to incrementally enhance airline revenues are available and actively used today. Balancing both operational goals such as call work time or service level with customer expectations of consistent service levels and recognition of loyalty is possible through integrated business solutions.

Only through integrated solutions can the airline realize the true potential of real-time revenue management and innovative merchandising techniques because the best opportunities to enhance revenue revolve around customer centricity and the ability to approach individual customers with up-sell and cross-sell offers that are logical and relevant based on the customers' individual profiles.

## Managing Costs Through Convenience

Airlines have achieved success today through integrated systems such as point of sale, PNR, GDS ticketing, interline ticketing, refunds and exchanges, and revenue accounting.

For example, by moving beyond passenger transactions and into the area of issuing electronic miscellaneous documents for items such as excess baggage and "deny-boarding" compensation, airlines are again advancing the issues of convenience for customers, as well as promoting fraud prevention.

And it's working. Customers are continuing to become more comfortable with electronic documentation in various areas of the flight experience because they have confidence in the integrated systems in place.

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In accordance with the most effective principles of customer sales and service, an airline's highest-value customers generally represent the best opportunities to enhance revenues. Depending on charge and ancillary service, airlines can produce US\$5 to US\$25 of incremental revenue from up to 20 percent of their passengers. And the smart airline will leverage information — through integrated systems — to enhance revenue when it reasonably can.

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Then the airline can treat customers consistently based on their relative value, which is determined by their own habits when making travel purchase decisions. Using advanced reporting capabilities based on historical check-in data, performance of distribution channels or even passenger buying habits can also result in informed decision making needed to fulfill the airline's marketing strategies. Finally, tightly integrated operations and customer service solutions enable airlines to efficiently reaccommodate customers based on their value and increase the likelihood of future travel.

What type of technology is required to execute a customer-centric sales and service solution?

- An airline must have technology that can transcend application platforms and streamlines communication between business services.

- In the case of customer value, the technology must facilitate a one-to-many relationship for service and data propagation.
- The technology must be flexible enough to work with existing infrastructure, third-party solutions or legacy systems.
- Finally, the technology must be efficient for reusing business services and enabling new solutions to business problems.

A service-oriented architecture coupled with a broad portfolio, industry experience and customer community gives the airline the right building blocks to execute a truly integrated customer-centric environment.

Customer sales and service enabled by integrated solutions is designed to realize more revenue, serve the customer and simplify enterprise solutions. The right mix of applications, technology and business processes is the wave of the future for airlines that intend to succeed and stick around for the long haul.

Are you one of them?

## Our Unique Expertise

The *Sabre Airline Solutions*<sup>®</sup> business, a *Sabre Holdings*<sup>®</sup> company, is the world's proven leader of software products for the airline industry, offering passenger management solutions and consulting services for airlines to simplify their operations and lower costs. More than 200 airlines around the world use its broad portfolio of smart solutions as decision-support tools to increase revenues and improve operations.

More than 100 airlines worldwide rely on *Sabre Airline Solutions* for passenger management solutions. In addition, more than 100 airline industry clients around the world have turned to the *Sabre Airline Solutions* consulting group for strategic, commercial and operational consulting.

The goal of *Sabre Airline Solutions* is to fundamentally transform the airline business by developing an appealing schedule to market to potential customers, utilizing the preferred distribution channels to sell more tickets, helping to serve passengers by providing the best customer experience throughout the travel process and managing daily activities to operate efficiently — now and into the future.



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[www.sabreairlinesolutions.com](http://www.sabreairlinesolutions.com)

**Worldwide Headquarters**  
Sabre Airline Solutions  
3150 Sabre Drive  
Southlake, Texas 76092 USA

Please contact our nearest  
regional office for more  
information:

**Asia / Pacific**  
Tel: +65 6215 9500  
E-mail: [contact.apac@sabre.com](mailto:contact.apac@sabre.com)

**Europe, Middle East, Africa**  
Tel: +44 208 538 8539  
E-mail: [emea.contact@sabre.com](mailto:emea.contact@sabre.com)

**The Americas**  
Tel: +1 682 605 6750  
E-mail: [contact.americas@sabre.com](mailto:contact.americas@sabre.com)



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