



# Accelerating Innovation

## New E-commerce Capabilities On The Horizon

Airlines can create their own unique, customized e-commerce solutions using a robust application programming interface (API) solution.

■ By David Turton | *Ascend* Contributor

**C**reating engaging, cost-effective e-commerce solutions for the airline industry is a highly complex process.

Some of the challenges facing airlines and their e-commerce solution providers include:

- Existing system integration,
- Ensuring consistency in user experience,
- Maximizing performance and scalability,
- Enhancing usability and conversion without loss of pricing accuracy,
- Security and fraud management.

The list actually goes on and on. Creating these solutions is only going to become more complex. Here's why:

- As traffic continues to shift to online transactions, airlines want and must do more to differentiate themselves from their competitors. To achieve this level of differentiation, carriers require highly customizable solutions that offer scalability, speed-to-market and ease of integration.
- Innovative mobile devices and platforms continue to proliferate. These offer new opportunities (or "touchpoints") through which travelers can interact with carriers during their trip. Each new touch point provides the individual carrier various opportunities to stimulate revenue growth and improve customer satisfaction.
- Maximizing the potential of "smart" devices requires extensive (and often costly) expertise. It is possible to build "one-size-fits-most" mobile applications that can run on multiple devices and in multiple formats. However, many carriers are realizing that they're going to need solutions tailored to specific devices to truly offer a unique customer experience.

Airlines need extensive knowledge to effectively sell and serve through any given touch point. They also require specialized expertise to handle back-office and system integration as well as deliver the experience on unique devices and platforms.

In other words, the increased complexity and customization that travelers and carriers demand make scalability (and, therefore, cost-effectiveness and decreased time-to-market) even more difficult to achieve.

A single solution provider cannot be all things to all airlines. Fortunately, one solution provider doesn't have to do everything.

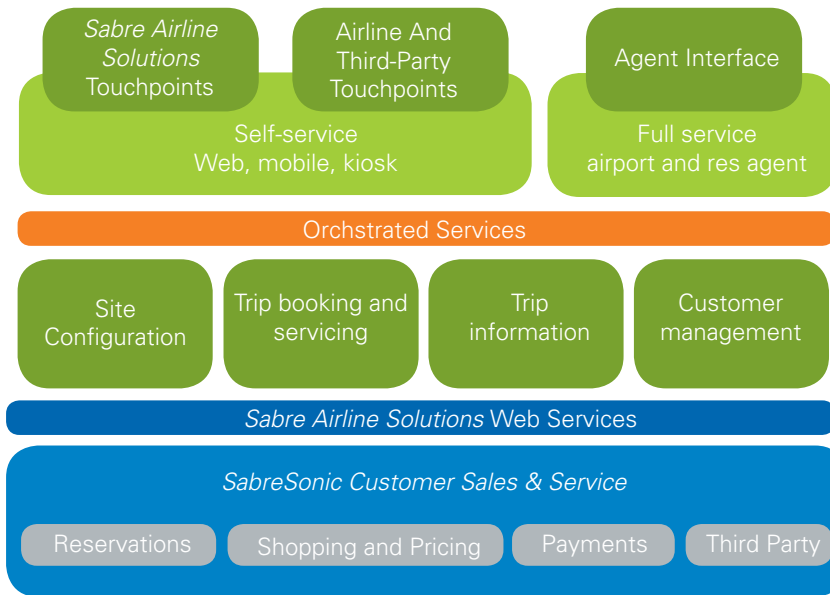
Solution providers can help carriers build their own unique e-commerce solutions by exposing core sales and service capabilities via a robust, efficient application programming interface — and hiding the complexity of third-party and existing-system integration.

In essence, this allows a carrier to focus on differentiating where it is most critical: at the customer-experience (or "presentation") layer.

"APIs promote innovation. Through an API, people who are passionate about a problem can solve it on their own," according to *Forbes* magazine.

*Sabre Airline Solutions*® will soon offer such flexibility and options. It will progressively expose capabilities from *SabreSonic*® *Customer Sales & Service* (*SabreSonic CSS*) in a new easy-to-use





**New Orchestrated Services** SabreSonic Customer Sales & Service capabilities will be progressively exposed via new orchestrated services. All Sabre Airline Solutions, airline and third-party touchpoints will utilize these services to provide a consistent traveler experience, regardless of the touchpoint in which they interact.

format. These services will be made available to all customers (or their partners) that wish to build their own e-commerce solutions, or even to customize SabreSonic CSS applications.

Travel-based Web services have been around for years. Sabre Airline Solutions is among numerous providers that already offer comprehensive industry-standard Web services to the travel industry. In fact, Sabre Airline Solutions processes more than 40 million Web-services transactions a day.

So how are the soon-to-be-developed services going to differ from current offerings?

The API is simpler and more relevant to e-commerce solution development. Effectively, this will allow developers to focus on doing what they do

best: building inspiring solutions that appeal to users. It will also enable airlines to work with a wider variety of partners because there will be less airline subject-matter expertise required.

Many low-level services will be orchestrated (bundled) into a fewer high-level services. This will allow solution developers to build rich functionality using just a handful of services. For example, a single service could be used to create a passenger name record (PNR), accept payment and issue tickets. Traditionally, this outcome may have required about 15 or so lower-level services.

The API definition (or schema) minimizes the use of complex airline industry concepts that were developed 50 years ago. Application developers

that use traditional service offerings must have extensive knowledge of legacy and related back-end systems. Their task is complicated by the fact that these host-based services are characterized by an agent-oriented business flow rather than an online business flow. This results in a longer, more-expensive application development lifecycle.

Sabre Airline Solutions' customer-experience applications (starting with SabreSonic® Web and SabreSonic® Check-in) will be built on top of these orchestrated services. This will enable airlines to use SabreSonic CSS applications for some touch points and their own applications for other touch points. This will ensure that travelers have a consistently enhanced end-to-end experience.

Alternatively, airlines could even deploy custom Web components inside SabreSonic Web (and later SabreSonic Check-in) applications. These components would utilize the same orchestrated services as the rest of the application, allowing airlines to customize where it is needed the most.

All orchestrated services will be exposed in multiple formats including, at a minimum, both Simple Object Access Protocol (SOAP) and JavaScript Object Notation (JSON), so developers can use the format that best suits their framework and expertise.

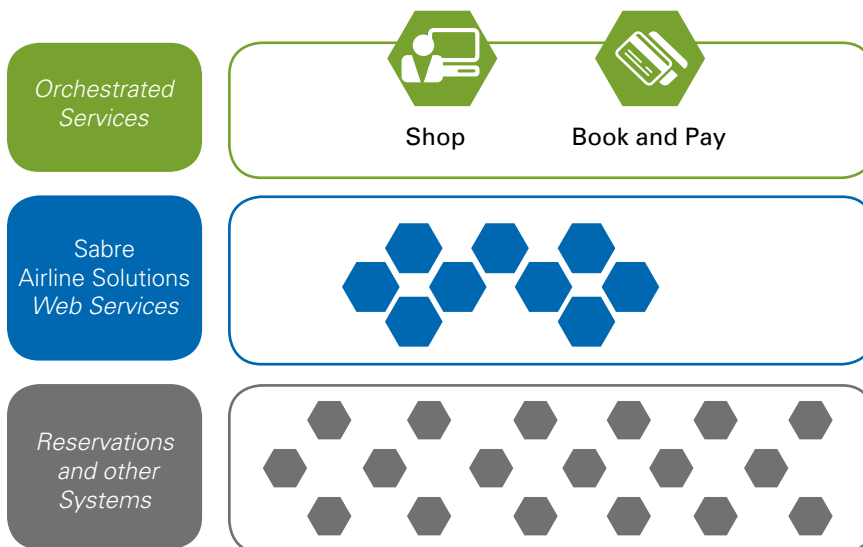
The API schema will be as independent as possible for the downstream systems that the services depend on. Its independent nature will help ease the integration of new or alternative services and content providers. For example, carriers will be able to use their own profile systems, loyalty systems, third-party hotel and car rental services, etc.

Airlines will also be able to commission new or custom services for compelling, unique business scenarios. For example, a carrier may require merchandising data sourced from an in-house system to be combined with traditional shopping data.

What does all of this mean for airlines? In a nutshell, these new, orchestrated Web services are designed to deliver:

- Increased control over the customer experience,
- Improved time to market for new capabilities,
- Improved ease of integration into downstream services (e.g. shopping, payments) and content (e.g. hotel, car).

The underlying technology will complement an airline's customer-engagement strategy. The choice and control they provide are critical elements in bringing its e-commerce vision to reality. **F**



**Reduced Complexity** Service orchestration simplifies a large number of low-level services into fewer high-level services, reducing the complexity involved in developing e-commerce applications.

SabreSonic CSS



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