

# Airline Menus And Sales Take Off With GuestLogix and Intel

## Case Study

Intel® Xeon® processor technology, Intel® Centrino® processor technology

GuestLogix

With a solution powered by Intel, GuestLogix now offers on-board retail technology and software so operators have the tools they need to become competitive on-board retailers.



Challenge	Develop the tools necessary for airlines to manage the new on-board retail environment.
Solution	Intel® Xeon® processor technology, Intel® Centrino® processor technology.

### Summary

In the airline industry, gaining an edge over the competition to secure customer loyalty is critical to profitability. Companies like Delta Air Lines\* and Alaska Airlines\* turned to new technology to turn up the heat on their "buy on board" catering programs and rely on GuestLogix\* to make it work. GuestLogix depends on Intel® for a secure and fast network to deliver the information needed to efficiently satisfy customers' in-flight hunger and comfort, including in-flight entertainment.

### Challenge

Increasing fuel costs and the downturn in the air passenger travel industry following 9-11 prompted many airlines to look for new ways to increase revenues and reduce costs without raising ticket prices. Many airlines moved from snack food on board to 'no food on board' before adopting a model of 'buy on board' food for their customers.

"We had been selling liquor or alcoholic beverages on board for a long time frame and this was a source of revenue for the airlines," recalls David Rodriguez, Manager of onboard retail services at Alaska Airlines. "Things changed after 9-11 and we had to cut drastically. Food wasn't seen as a revenue stream so we needed to cut that cost."



Airlines realized they couldn't simply eliminate food from flights. "We know that food is important to customers and one of the favorite passenger comforts," says Jake Frank, Managing Director In-Flight Services / On-Board Services, Delta Air Lines. "Buy on Board programs give customers the food they want, without adding costs to our tightening margins."

With the food solution in place, airlines had another challenge: ensuring the right combination of food was being loaded onto each flight. With moves at both Delta and Alaska Airlines to provide more fresh food for travelers, they needed to better forecast demand for their menu items so that passengers could get the food they wanted to order, without wasting food that had to be thrown out at the end of each flight.

"We didn't have a way to keep track of the data coming in from each flight on what was selling and what wasn't," says Rodriguez. "We had paper forms that flight attendants would fill out and give to customer service agents to enter into our database, but it took time to get that information emailed to us and we weren't sure how accurate it was."

The challenge for each airline was managing that new retail environment. And, the airlines needed an in-flight tool to help flight attendants process credit cards to manage the different price points of their menu items, while interfacing seamlessly with legacy back-office operation technology. This integration would give staff timely access to what items are selling well and what items aren't so they can make informed decisions.

## Solution

For GuestLogix, this challenge presented an opportunity. GuestLogix specializes in developing on-board retail technology and software so that air, rail and ferry operators have the tools they need to become competitive on-board retailers. Success in retail enhances customer satisfaction and drives additional revenues for the operators.

"Airlines need to look at each flight taking off from an airport and landing in another city as a mini retail store. The store opens when the plane takes off and closes when the flight lands," says Brett Proud, Executive Vice President of On-Board Retail Development for GuestLogix.

GuestLogix takes traditional supply chain, in-store operations and tailors the retail processes for on-board sales. The proprietary software is integrated with flight operations for scheduling, flight destination, traveler profiles and schedules for flight attendants, who are the on-board retail store staff.

Proud also notes that over time, airlines could change the types of products being sold on board based on the profile of the travelers on specific flights, including offering different food or comfort items for business versus vacation travelers.

To manage the sales on board, GuestLogix outfits flight attendants with handheld devices which act as both cash registers and electronic menus. "They are sleek, not heavy and ruggedized to meet the demands of the cabin environment," says Proud, noting that the staff operate the store offline while in the air, but the minute the flight lands the handhelds, running in a Windows CE\* environment, connect to GuestLogix servers using a wireless network.

Using a Windows CE platform and Intel® XScale® microarchitecture, GuestLogix was able to provide a powerful handheld experience for both passengers and flight attendants, which is helping to drive successful implementations.

Both Delta and Alaska Airlines brought in their flight attendants during the decision making process to make sure the software was intuitive and easy to use, and the handheld devices would give them everything they needed in a form factor that was light and durable.

"Intel architecture allows us to use Windows CE operating systems on the device. The combination of Intel and Windows CE gives us a solid backbone to build quickly and improve our product on the fly," says Lewis Baios, Vice President Delivery.

"We have nearly 10,000 mobile devices sending and receiving data 24/7," says Baios, whose job includes managing the physical data centre facilities, server and hosting environments to make sure they



are secure, available and scalable to handle the growth that is coming to the company. The company has a cluster of HP\* blade servers running Quad-Core Intel® Xeon® processor technology.

GuestLogix has expanded from eight employees in 2002 to 38 today and seen revenues that have increased 10-fold in the past two years. To manage this growth, they needed a scalable infrastructure that would be able to grow with them. To make sure the technology is running 24/7 in a reliable and secure environment, GuestLogix standardized on Intel®. "We have chosen Intel because it is the best technology to enable our rapid growth," says Proud. "It is incredibly important that we can scale to keep our costs down as our growth ramps up. We need to be able to add customers to our hosting environment without having to add more technology every time. And, the technology has to move fast, for all components of our business model to be successful."

## Key Advantages

The GuestLogix software service, coupled with the handhelds, is a core enabler of the food for sale program on both Delta and Alaska Airlines.

**"I wouldn't dare implement this kind of program without technology. We wanted a turnkey solution that could handle point of sale and reporting, as well as one that would give us the ability to manage the program remotely."**

*- Jake Frank, Managing Director In-Flight Services / On-Board Services, Delta Air Lines*

Proud says that for some airlines, the revenue potential from an effective 'buy on board' program has been significant. Since the cost of flight attendant staff is already factored into the operation, sales revenues can drop right to bottom line profitability. "We need to integrate our technology into flight attendant food service delivery so we don't slow them down in the delivery of their service," he notes.

## Integration Gives Instant Access To Data

With the volumes of data being generated on each flight, and the high levels of integration required to interface seamlessly with flight operations, GuestLogix has to ensure its operational environment is bulletproof. Whether it's the data sent following a flight to process sales, or raw data for inventory management, all of the back-office processing is handled in GuestLogix's data center powered by Quad-Core Intel Xeon processor technology. The service is provided as 'software as a service' model to airlines, bundled with hardware, training and support.

Access to instant information about what is happening on a flight will allow airlines to merchandise better than ever before. "On every flight, we can show them what is selling and what is not, so they can adjust inventory levels accordingly," says Proud.

With a large menu of gourmet fresh food, instant access to information about how much food is being sold is critical. Frank says, for example, that if he notices some items aren't selling, he can quickly have caterers cut back on volumes. He can also instantly track when items are being sold out on a flight so he can bump up the quantities.

**"It's not just about knowing what items have been thrown out because of spoilage, it's also about knowing what items I could have sold if I'd had more available. I can now optimize for the maximum number of sales per item, per flight. There's no way to do that in a paper-based system."**

Additionally, Frank can see at a glance if new menu items are popular by being able to see reports on GuestLogix servers that identify how many repeat sales a new item might get. "If I see a spike in sales for a new item the first week, then a big drop later, I can see that perhaps customers were curious about a new item, didn't like it, and chose not to re-order it on future flights."

"We can see that information the minute a flight lands," adds Frank. "We have the ability to pull down any kind of report or data we need to compile custom reports for our teams. We can't talk specifically about revenue generation because with an airline our size, it is a small contributor to the bottom line. But we can track customer satisfaction, and a satisfied customer will travel with us again."

At Alaska Airlines, the handhelds have eased the work of their accounting department who were often faced with an envelope of money at the end of a flight and didn't know where to attribute the revenue. Rodriguez says the customer service personnel were happy to hand off this process which he described as an exhausting task of "trying to figure out what to do with the money. We couldn't easily recreate what happened on the flight before."

GuestLogix has built into its software a workflow engine that instantly issues an alert to airline staff if results from a particular flight hit specific criteria. For example, if sales are dramatically lower than projected, operations know immediately when the flight lands so they can take action.

"I can pull up a report at any moment and see what we are selling," Rodriguez says, noting that before implementing GuestLogix, it could take a week to get the data back from a flight. "And even then, I wasn't sure if it was right because so many people had touched it by then. Additionally, with more fresh items being sold on the planes, we need to manage spoilage and handhelds are critical for doing this."



**“Access to instant information from the point of sale devices allow us to keep a finger on the pulse of customers and make decisions on what to carry,” notes Rodriguez. “We can forecast better in terms of what we need to load on a given flight and reduce fresh items that aren’t selling.”**

For Delta, a top priority for this program is making customers happy, and they are succeeding with a gourmet menu that appeals to travelers. “We are beating the competition in customer satisfaction by 15 to 20 percent, and the program is performing well against the economic goals we had set. We’re doing great right now.”

Alaska Airlines has only just started tracking profitability. Today, Rodriguez says they can actually see how their program is performing and start to make decisions about what items are selling and what aren’t, as well as which items are underpriced.

**“We simply couldn’t see this level of detail before,” says Rodriguez. “Decreasing waste by 10% or increasing revenues by 10% as a result of our new access to information will more than pay for the system. We are hoping for even better results.”**

### **Wireless Keeps GuestLogix Team Connected**

Whether connecting mobile devices over the cellular phone network, or connecting to the office via a VPN connection and wireless hotspot, mobility is critical to the growing staff of GuestLogix. More

than half of their staff are equipped with notebooks that have Intel® Centrino® or Intel® Core™ Duo technology so they can be productive while traveling or at a client site. Whether connecting to the head office from London, Singapore, Texas or Toronto, Proud says that a fast, wireless connection during sales demos and meetings helps close the deals. “We are selling at a very senior level and we need to showcase technology at work, seamlessly.”

The company uses remote demos, web conferencing and VPN access to showcase how the technology can work in a real-time environment. Additionally, as a firm that focuses on excellence in customer service, they need the tools to keep projects on track and to meet customer deadlines.

“These people are road warriors. We need to give them the best technology to stay connected,” says Proud, who is currently looking at new Lenovo Thinkpads\* powered by Intel Centrino technology to give his staff the combination of long battery life and processing power, for maximum productivity while traveling.

“Getting six or seven hours from a battery charge is a big thing when you’re on a plane. We need to make sure our sales team has the right tools, so we are always looking for the latest advances in power and battery management.”

Baios adds that using the latest technology in their notebooks and their servers impresses clients. “When a customer sees we’re running best of breed technology, like Intel and Microsoft\*, they don’t question the reliability. If we were using an unproven technology, they would ask more questions so it’s one less thing for us to answer during the sales cycle.”

## Growth Is Virtually Unlimited

Since GuestLogix is continuing to grow, the ability to ramp up for new customers or more mobile devices coming on stream is important. For this level of scalability, coupled with the ability to roll out new development environments quickly to respond to customer needs for custom reports or new functionality, Baios depends on virtualization technology made possible by Intel.

"Intel® Virtualization Technology (VT) is quite revolutionary in terms of the flexibility it gives you," he says. "In the past, if you needed four more servers, you'd have to buy them, put them in the rack and even in a very efficient organization that could take days. With Intel VT, I can adjust server demands on a day to day basis by virtualizing the environment I need for development or quality assurance testing for a new feature and get that copy up and running in seconds."

Baios adds that another innovation that benefits GuestLogix has been multi-core servers that allow the company to add more cores or specialized cores to respond to new clients or greater demands. It also allows for the redundancy they need to operate mission critical systems 24/7.

By running multiple environments on multiple cores, GuestLogix can minimize their power demands by taking up less space in their hosting facility.

## Future Uses

At Delta, Frank expects the food for sale program to mushroom. "This is an enormous platform for us. We have just added vitamin water and we'll continue to add new food and beverage items, as well as other merchandise, that will make our customers' travel experience more enjoyable."

Our food for sale program is here to stay and that means big things for GuestLogix and Intel as long as they continue to be leaders in this field," says Frank.

Rodriguez also anticipates adding new products and the ability to adjust pricing of product to ensure the program is making money for Alaska Airlines and not losing revenue on specific items. He says they are also looking at selling other items on the plane such as Duty Free products.

GuestLogix is continuing to evolve their software service to integrate with more vendors and airlines. They have inked a deal with Skymall\* to allow travelers to purchase items from their catalogue while on the flight, and have recently made a deal to connect with a service provider to offer Broadway tickets on board.

Additional benefits could come from using the on board handhelds as laptops and downloading critical flight information to the handheld devices so flight attendants no longer have to lug manuals or carry typed reports on the plane.

With increasing access to wireless connectivity, the devices could also be used for flight attendants to talk with flight operations on the ground while in flight.

For more information on  
Intel® Xeon® processors, visit [www.intel.com/go/xeon](http://www.intel.com/go/xeon)  
Intel® Centrino® processors, visit [www.intel.com/products/centrino](http://www.intel.com/products/centrino)

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT. UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting Intel's Web site at [www.intel.com](http://www.intel.com).

Copyright © 2008 Intel Corporation. All rights reserved. Intel, the Intel logo, Intel. Leap ahead., Intel. Leap ahead. logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

\*Other names and brands may be claimed as the property of others.

