

Airports Eyeing New Options to Lower Carrier Costs

By Peter Haapaniemi

Not all airlines are created equal. They come with distinct needs and take different approaches to deliver a positive customer experience. Yet, with many carriers facing severe financial turbulence, they need airports to step up with new ideas that reduce costs while delivering the services their passengers expect. For airports, it means establishing the flexibility to adapt and streamline services in ways that meet the carriers' individual needs.

Airports are starting to answer the call. In Singapore, Changi International Airport Services (CIAS) provides a full range of ground-handling services to several airlines at Changi International Airport. In July 2004, CIAS took a leap forward in simplifying that process with a new system that integrates various airlines' host systems with a single airport check-in system.

As a result, CIAS can check passengers in smoothly and efficiently and easily stay ahead of workloads during peak travel periods.

The system has "significantly reduced staff training time and the overall check-in process for the airlines we serve out of Changi International Airport," says See Seng Wan, vice president of ground and cargo services at CIAS. "[It] has helped us achieve increased efficiencies, making the overall traveler experience here a very pleasant one."

This new approach is just one of many innovations taking root in today's airports, a trend that is driven by a number of fundamental changes that are reshaping the business. For example, the airport's central customer base -- the airline industry -- has been struggling for several years, resulting in less-reliable revenues for airports. Costs are going up, as are security requirements.

And workloads are growing. Globally, the number of passengers is expected to increase by more than 4 percent annually, reaching some seven billion a year by 2020, according to the Geneva-based Airports Council International.

Not surprisingly, these changes have affected the industry's bottom line. A survey conducted by Airports Council International shows that airports' aggregate global operating margins fell from 27.9 percent in 2001 to 19.3 percent in mid-2004, while net profits fell from 14.5 percent to 6.8 percent in the same period.

"Over the next five years, airports are definitely going to be under increasing pressure to deliver better value and efficiency," says Mark Darby, partner in the Unisys Transportation Management Consultancy practice. Industry executives are not blind to this reality. Many are now exploring new approaches to everything from technology to business models and rethinking the basics of how they operate in a changing world.

Desired Destination: Greater Flexibility

For airport officials, one of the basic mandates of this new era is increased flexibility in both costs and business models, which allows them to adapt to shifts in the business environment. "Essentially, airlines and airports are in the process of reinventing themselves and developing business plans that are flexible enough to make 180-degree shifts," says Paula Hochstetler, president of the Airport Consultants Council. To a large extent, this means changing the often-rigid agreements that airports have with airlines.

In the United States, in particular, individual airlines tend to have significant control of the operations in their portions of a terminal for long periods of time, making it difficult for the airports to adjust to changing demand.

The need for flexibility is driving increased interest in "common use" infrastructures, an approach that's already widely used across Europe. Here's the idea: Rather than have various airlines run different dedicated systems, equipment and facilities, let the airport operate the entire infrastructure in a centralized fashion. With a common infrastructure in place, airports can quickly shift resources around to meet demand.

Essentially, airlines and airports are in the process of reinventing themselves and developing business plans that are flexible enough to make 180-degree shifts.

Paula Hochstetler, President
Airport Consultants Council

They could, for example, have different airlines use the same check-in desks at different times of the day. "By going to common facilities and systems, airports can assign carriers based on need rather than locking those facilities up with carriers who may or may not be using those resources efficiently," says Tod Yankee, principal at the Boston based Yankee & Associates consulting firm.

"The key word here is utilization," says Urs von Euw, director of the airport practice at Unisys. "If you can bring up the utilization of check-in desks, you can handle more passengers. And if you can bring up the utilization of the gates, you will have more capacity."

Each airport's situation is different, of course. But in general, he says, "if you increase utilization of your staff from 50 percent, which is a good average, to 60 percent, it will have close to 15-percent positive profit impact."

Increased flexibility may eventually open the door to the unbundling of airport services, so that airports can offer airlines a menu of services, rather than monolithic, one-size fits-all package. In this case, airlines could select and pay only for those services that are required, helping them keep costs down. This approach also enables airports to streamline their own operations by eliminating the less-desired services.

Helping Airlines Spend Less, Earn More

As they work to increase flexibility, airlines are also sharpening their focus on efficiency and reduced costs. The main reason: growing pressure from their customers. Low-cost carriers have brought new levels of competition to the airport industry, explains von Euw. "Low-cost carriers will often shop around, telling an airport, 'We have six daily flights with standard 737s, with an average load of 100 passengers. Give me your rock bottom offer. And they will do that with three or four airports in the same urban area.'"

Traditional carriers, too, are becoming increasingly vocal in looking for reduced fees, as they face significant cost-cutting battles of their own.

Increased efficiency is also important if airports are to keep pace with growing workloads brought on largely by low-cost carriers, which typically bring a higher number of flights into a facility. "I think the goal for everybody right now is to get more capacity out of a limited amount of resources," says Yankee. "They are squeezing more people through fewer resources. Many of today's terminal facilities weren't designed to accommodate such intense traffic."

Airports today have a growing array of tools at their disposal to streamline operations. These range from sophisticated resource-management systems for coordinating gates to vehicles, staff and self-service kiosks that reduce the load on human agents. What's more, biometric identification systems are being added to support security efforts.

"The technology is there to streamline a lot of processes -- cutting paperwork, reducing the need for large numbers of people, and speeding passengers through the airport," says Chris Eite, director of e-business programs, Airlines & Transportation, Asia Pacific, at Unisys. And there is significant room for improvement on that front, he adds. "There is still relatively little use of automated baggage reconciliation. Many airports are basically still using paper to keep track."

In addition to cutting costs, airports are looking to enhance the top line by developing more revenue from passengers coming through their facilities. "There seems to be an increasing emphasis on airports treating passengers as the airport's customers, rather than as the airlines' customers" says Yankee. "Many airports have been rapidly trying to change their business model to that of retail operator as much as an airport operator," says Darby of Unisys.

For example, he explains, the fees that the British Airport Authority (BAA) can charge airlines have been capped by the government. "So, they have been making it up through other sources of income. More than 50 percent of the BAA's revenue now comes from retail and other operations. And rather than just renting out shop space, they are often in revenue-sharing agreements with the shop operators. Overall, it's been quite successful for them."

Integrated Systems, Integrated Management

At heart, airports find themselves in a changing environment that requires sophisticated management. To keep up, they must take a more holistic approach to overseeing a complex, multifaceted business, which requires an integrated approach to the technology that supports the business.

Today, however, it's not unusual for a facility to be working with more than 400 disparate systems. As a result, it's difficult to pull information together into the kind of coherent picture needed to plan and manage operations and to respond to change.

At China's Guangzhou Baiyun International Airport, officials have tackled that problem with an innovative Central Integrated Information Management System (CIIMS). Developed by Unisys, the system constantly gathers flight-related information from airlines, handling agents and air traffic control into a central database. CIIMS disseminates real-time data to key staff in the airport community, government agencies and the general public.

There seems to be an increasing emphasis on airports treating passengers as the airport's customers, rather than as the airlines' customers.

Tod Yankee, Principal
Yankee & Associates

"The solution captures all of the movements and all of the things going on across the airport," says Eite. "It also provides optimization tools that let you plan what's going to happen in the next 30 minutes, the next hour, the next two hours, the next month and so forth." The result is improved use of airport resources, reduced costs and the accurate feedback needed to keep improving processes over time.

These types of integrated systems can also help airports manage a growing range of partners and vendors. "As airports become more service-oriented, they'll often have service-level agreements with their providers, such as independent ground handlers," says Eite. "With detailed information about airport activities, they can track service levels closely to help ensure that delays and errors are minimized. They can also monitor whether the airport is delivering the right levels of service to airlines and passengers."

Airport Business Models Transforming

Such extensive integration requires more than the linking of systems. Airports need to develop a comprehensive view of their environment and understand how the business fits with the underlying infrastructure. For example, Unisys uses a set of tools that let airports simulate the interrelationships between their vision and their business processes, applications and infrastructure. Known as 3D Visible Enterprise (3D-VE), the Unisys approach provides vast insight to create plans for moving ahead.

Perhaps most important, airports can try out different scenarios under 3D-VE; this allows them to easily explore a number of new ideas. For example, they can test how a change in the infrastructure will affect a business process.

"It lets you envision beyond what you see today," says von Euw of Unisys. "It helps you find innovative approaches to operating the business, and that's getting to be more and more important for airports."

The transformation to new business models and technologies is not going to happen overnight, of course. As they proceed, airports have to consider everything from contracts with airlines to government regulations and passenger needs. But their business is changing, and to thrive in the coming years, airports will have to change with it.

Ideally, experts say, they will begin doing so soon. It can be a long process, but as Tod Yankee stresses, "you've got to start that process and put a road map together to get there."

Peter Haapaniemi is a journalist specializing in business and technology.