



Leading Airport Operator Automates its Forecasting and Car Park Pricing Process with CarParkPRO

Customer Overview

The Client, viewed by many as one of the world's leading airport companies, owns and operates some of the busiest international airports in the world handling in excess of 100 million passengers per year.

For most of the airports within its portfolio, the Client's breadth of responsibility covers managing both terminals and airfields, overseeing operations such as security, property management, mass transit, engineering and customer services, as well as retail facilities. In 2006, the total retail activity of the company's three busiest airports generated an income of \$850m.

The Challenge

The Client currently owns several car parks at each of its airport locations, and works closely with a number of car park operators responsible for the day to day operation of each car park locally. As car park revenue represents a large part of airport retailing income, optimizing revenues in this area is crucial to the Client and prior to embarking on a revenue management project, the Client faced a number of challenges in this area.

Previously the Client's car park pricing strategy was similar to that adopted by most airports: each airport offered a range of parking products, from low cost airport parking for budget conscious travelers, to convenient business parking close to the terminals, valet parking for fast getaways, as well as long and short stay options. The majority of these operated a simple pricing structure, either with consistent pricing throughout the year, or a seasonal calendar based on historical patterns of demand.

Prices were adjusted manually according to season (high/mid/low), which meant that particular times of the year, such as the Thanksgiving/Easter holidays or other historically high demand periods, had different pricing to the norm. However,



Clarity.
Confidence.
Control.

although this method of pricing permitted the basics of variable pricing throughout the year, employing seasonal calendars in a manual environment did not really reflect the complexity of the marketplace and the changing nature of demand patterns.

In addition, the Client offers a pre-book facility whereby customers planning a trip to the airport can book their car park space ahead of time, taking advantage of pre-book prices which are less expensive than drive-up prices. Historically, these discounts were typically linked to the price preset for the date of arrival in the car park, and were not limited by expected occupancy or how many bookings had already been received for that period.

This method of pricing lacked the sophistication to rapidly respond to competitors or to consumers' receptiveness to price changes. In essence, the Client operated a system which could not adequately account for the complexity and fast moving nature of the car parking market, and could not effectively compete with other modes of transport to the airport.

Additionally, other viable and sometimes less expensive modes of transport, such as trains, buses and taxis were increasing their share of passenger ridership.

The Client also wanted to use the internet to its best effect for the promotion and sale of its car parking products. The traveling public uses the internet not only to compare prices but to pre-book parking to secure the best discounts on the drive-up prices, and it was essential for the Client to ensure visibility of its range of products alongside those of off-site car parks located close to the airports offering extremely low cost parking. To achieve this, they were working with a range of third party sales channels, which added further complexity in the distribution of prices through its own and third party distribution channels where the communication of prices, their uniformity and consistency, was critical.

The Client recognized that in this highly competitive and dynamic market their business had to move and respond to change. The desire to maximize car park revenues to improve the returns achieved on these assets, as well as the lack of sophistication in the existing pricing process, provided the impetus to change the way the Client made pricing decisions for its car parks.

The Solution

The Client's management team planned an approach to tackle these challenges and to ascertain whether the principles of pricing and revenue management could apply in a parking environment. After issuing an RFI and meeting with a number of different vendors, it became clear that no one had ever developed a solution for the parking industry that managed prices and optimized revenues. IDEaS however had extensive experience of delivering exactly this type of solution very successfully in a variety of other industries and was convinced of the benefits of developing a solution specifically designed for the parking industry.

Thanks to its broad experience in pricing revenue optimization and drawing upon the extensive knowledge of the parking market within the Client's reference set, IDEaS worked closely with them through the creation and implementation of a completely innovative solution, providing advice throughout the planning phase and a high level of expertise in creating a fully automated software solution, built around the way car park operations are managed.

In the early stages, IDEaS analyzed the Client's historical transactional data, which was fundamental in order to

identify patterns of demand. Such patterns allowed IDEaS to accurately forecast passenger demand for car park spaces in the future. In addition to this, the analysis of historical demand enabled IDEaS and the Client to identify which products were most profitable and in demand by consumers and where there was opportunity for new products tailored to passenger needs to capture previously untapped demand.

A proof of concept was implemented at one of the airports in the fall of 2005 to early 2006, in order to automate the forecasts and many of the pricing decisions, and to demonstrate the feasibility of the new solution. This allowed the Client to automate their existing pricing decisions and make a staged progression to a more sophisticated pricing model.

Working closely with the Client, lessons learned from the proof of concept were also used to further define the functional requirements of IDEaS' automated and self learning Pricing and Revenue Management solution for the parking industry. This new solution would need to include a wide range of features not possible in a proof of concept and be designed with a technical architecture that would support flexibility and growth.

At the completion of the proof of concept phase, the Client examined the results to validate the contributions to the business while IDEaS recalibrated the solution based on what had been learned during this phase. The recalibrated solution ran throughout the summer and, at the end of 2006 after proving successful, it was also deployed at another of the Client's major airports, an airport chosen especially because of its high proportion of car park pre-booking.

By integrating with the booking software and the data from the car park systems, the new solution enabled the Client to respond dynamically to changing market conditions as well as variations in consumer demand. The systems adopt specialized algorithms which allow for automated updating of forecasts based on recent trends through pattern recognition technologies. As an example, such algorithms are able to detect shifting trends, such as fewer people driving to the airport due to the increased availability of public transport, as well as one-time events which may temporarily suppress or increase demand. The integration of booking software and car park systems also ensures that pricing decisions can be distributed rapidly to the various sales channels through an automated interface.

In December 2007, the fully developed commercial version of the solution was launched, and both initial airports migrated from the proof of concept solution to the commercial solution, known as CarParkPRO (Pricing and Revenue Optimization). In addition, The Client simultaneously deployed the solution at the largest of its airports, with over 50 million passengers per annum.

CarParkPRO is deployed On-Demand via a SaaS (software as a service) model, where the hosted software is run from a secure datacenter and can be accessed by users via the internet. This methodology allows for ease of deployment, little impact on existing IT infrastructure, smaller upfront costs as well as increased flexibility. In designing the solution, IDeaS acknowledged the necessity of having a great deal of flexibility around the solution, as the airport car park business can be affected by a variety of external factors such as changes to flight patterns, government regulations, and even weather conditions.

The Results

The Client's commitment to addressing the challenges it faced and its understanding of what it wanted to achieve allowed it to look for a solution outside of the parking industry. This engagement with IDeaS, the world leader in travel and hospitality focused Pricing and Revenue Optimization solutions, has paid off. The Client has now fully automated its forecasting and car park pricing process for its busiest airports. This allows for a more effective distribution of prices while helping to ensure, at the same time, reliable and accurate revenue and utilization forecasts.

This solution has been of mutual benefit to the Client and its customers, something that was always a key objective for the business. CarParkPRO allows the Client to rapidly offer products more tailored to the demand of customers wishing to park at its airports, to the extent that many passengers are now taking advantage of less expensive prices at off peak times and on days with lower demand. This has been achieved at the same time as maximizing the utilization of the car parks whilst maintaining the optimum price points for each product available.

Added to this, the Client can also use the solution to shift demand from oversubscribed car parks to those which are less popular by using pricing as the control. The same controls also help avoid overbooking by managing the relationship between drive-up and pre-booked and guarantees a more efficient utilization of the parking areas.

With a number of initiatives and tools in place to support growth and improve the commercial performance of the business, the Client's partnership with IDeaS continues to positively affect the overall company business by helping to maximize revenues from car park operations. While the full range of benefits both financial and operational is still being measured, The Client has confirmed that the installation of CarParkPRO is already proving invaluable and is expected to help fully leverage revenue opportunities at other airports within its portfolio. Dynamic optimization of pricing now allows the Client to remain aligned with – and ahead of – the marketplace.





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