



## *Case Study* **Nova Rentacar Reservations Ltd.**

This company, currently a significant player in the global car rental space, started as a small Irish car rental reservation startup in 1997. Initially the company faced the challenge of having to compete with other established players in the market with sizeable, subsidized budgets.

Their line of business was to provide rental car booking service to customers and they wanted to innovatively exploit the new media of Internet to increase their reach and somewhat level the playing field. A little ahead of their peers in the business, the company began looking seriously for a company which would implement a web-based quotation application that would be user-friendly and effective, but, would not constrain their purses too much.

### **The Problem**

We needed to deal with four basic problems or constraints at the very outset:

1. It was necessary to develop a sophisticated, custom-made system that would be able to compete with larger contemporary companies in the market.
2. Since this was a very small startup venture, the costs involved were a major concern and therefore the budget for the program was necessarily very low.
3. How best to use emerging internet technology to level the playing field and providing the company with competitive advantages.
4. To design software to cover multiple companies from multiple countries with multiple locations and widely varying rental parameters, all within a single monolithic quotation generation application.

### **The Solution**

The technical solution needed to be low cost, but, the quality needed to be high and the framework needed to be extremely scalable. The website was housed at virtual servers to start with and the choice of technology platform was limited by the ones offered by the virtual host. Soon Nova was doing good business and more independence in choice of technology was available as we could graduate to a hosted server. In initial months the server was hosted within Tathya's US office to cut data centre costs and provide more flexibility to the application development team. The final software solution had the following ingredients:



1. It was based on the Linux operating system and used other proven open source and free software components.
2. The web application was so developed that it would automatically display the lowest quotation on offer for each quote that was submitted so that the customer did not have to manually search for the best price. This service provided an edge over other competitors in the field.
3. Even after installing the software the credit card processing was manually handled during the initial months. Once the business started rolling we implemented an e-payment solution, which helped the company to reduce cost and increased their ability to handle bookings more efficiently with a small staff.
4. Initially the booking confirmation with the car rental companies were also handled manually through individual emails. However as the internet web services frameworks matured, we moved on to more seamless integration of this component to make the process of booking confirmation/ cancellation more efficient and transparent.

Eventually, the whole server infrastructure was shifted to a high end co-located data centre in London and constituted six high-end web servers.

A project that started with a mere virtual domain on a shared server, in seven years had six independent servers! In terms of size of the technology infrastructure the growth was much more than 100 times!

## Benefits Accrued to Nova

What started as a small car rental reservation service, catering to inbound visitors to Ireland from the USA, but based in a portakabin at the end of the owners' garden, fast expanded into one of the top car rental companies with global reach. The company was able to leverage the skills of a virtual team of programmers that worked full time on their IT infrastructure, providing much needed flexibility and scalability. As a result, profitability soared and after growing the company for some seven years, in August 2004 the original owners were able to sell the business for a significant sum