



# RECREATING REVENUE MANAGEMENT

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# Recreating Revenue Management

Unprecedented times and rapidly advancing technology have accelerated a need for a novel and ingenious approach to Revenue Management.

Six months after the onset of COVID-19, travel is just now beginning to emerge from the disruption. [“Normal” travel levels may not resume until 2023.](#)

In an environment where there is little or no demand to manage and meager revenues force hotels to make draconian cuts, [some in the industry](#) question whether there is still a need for Revenue Management.

I have written that Revenue Management will not only survive, but it will even thrive in this unpredictable environment. However, to do so, those in Revenue Management must [THINK DIFFERENT.](#)

## The Creation of Revenue Management

I was at Delta Air Lines during the dawn of Revenue Management. Just after airline deregulation we were struggling to survive against start-ups whose costs were one-half of ours. Consequently, they had fares one-half of ours. At first, we ignored them. We lost share. Then we matched their deeply discounted fares. We lost hundreds of millions of dollars.

At Delta, there was no lack of ideas about what must change. I knew that we needed to cut our costs, but in the meantime, I pitched the idea of a computer system which could raise revenue by targeting deeply-discounted seats to just the flights where seats would otherwise be empty. It was a multi-million-dollar investment which was met with some skepticism because we were bleeding cash.

It was a difficult pitch. At the time, computers had only been employed to reduce costs, not to enhance revenues. During my final presentation, then-President Ron Allen asked, “How much money will we save?” I replied, “This isn’t to save money. We expect to generate \$40 million from saving seats for late-booking, high-yield passengers and targeting discount seats to flights that need them.”





Ron was hesitant, so I added: “With this system, we could cut our manual discount seat management efforts in half.” That would reduce headcount by 25. And THAT off-hand remark seemed to sway Ron. The first Revenue Management system was approved.

After the system was up and running, I saw Ron in the hall. “Where’s my head-cut?” he asked. I had not actually promised staff reduction as an essential part of the package, but Ron certainly thought I had!

I had to think fast. We’d built a state-of-the-art *Decision Support System*. Every night, it would analyze each and every one of Delta’s 550,000 future flights. It would find the flights that required either more or fewer discounts and present them to analysts. It was impressive

technology for the time--but it was mostly just a smart filter. Humans were required to act and make the indicated changes.

I told Ron, “Before we make any cuts, why don’t you get a demo of the system in action?” Ron agreed.

I set Ron up with one of our best analysts who was working the hyper-competitive New York to Florida route. The first report identified a Sunday night departure that was filling fast. With a few adroit keystrokes in the reservations system, the analyst removed discount seats resulting in \$1200 more revenue.

The next flight was a Saturday morning departure which was projected to go out with 40 empty seats, yet it was completely out of discounts. The analyst added more discount seats resulting in another \$2200. The next flight was worth \$800. Another flight, another \$1200, and so on. Within 15 minutes, he had generated over ten thousand dollars in future revenue.

Ron turned to me: “Are you sure we have enough people?” “We do for now,” I replied. Paired with hard-working analysts, the system generated \$900 million (measured in current dollars) the first year, and our success was front-page news in *The Wall Street Journal*.

I left Delta to start a Revenue Management firm. Bill Marriott heard about the success we were having in the airline industry and he called us in to help create Marriott's first Revenue Management system.

Over the next few decades, Revenue Management systems rapidly spread to hotels and many other industries.

We worked with over 100 companies in developing Revenue Management systems. As learning in the discipline and technology advanced, these computers became knowledge-acquiring systems with revenue optimization engines.

In one of the breakthrough moments for Revenue Management, my company—Revenue Analytics — partnered with IHG Hotels to introduce the first sophisticated,



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automated price optimization. The system was deployed to over 4,000 hotels worldwide, priced 250 million rooms daily and generated \$400 million in annual revenue.

As advanced as these latest systems were, they still required significant human oversight and intervention. They were still primarily *Decision Support Systems*, and the function required numerous, trained scientists to oversee the system and highly skilled Revenue Managers to execute properly.

The labor-intensive obligation of current systems is one of the reasons that, despite the unequivocal revenue gains from Revenue Management, only an estimated [over 16% of hotels globally use Revenue Management technology](#).

# The Re-Creation of Revenue Management



In my article, [Revenue Management in a Crisis—Rise of the Humans](#), I suggested that it may be time for humans to rethink how they leverage technology to deploy Revenue Management in a post-COVID world. Two primary factors drive this need.

First, travel disruptions caused by the pandemic have adversely impacted Revenue Management databases and warped many of the algorithms that worked well with “normal” demand.

Secondly, and perhaps more importantly, we now expect far more from technology than we did when Revenue Management was first created. Previously unimaginable computer prowess in the realm of chess, GO and Jeopardy has proven that

machines can regularly exceed even world-class experts’ performance in many complex analytical tasks.

We rely on automated assistants like Siri, Alexa and Waze to not only retrieve and analyze information, but to execute tasks for us. We are rapidly entering a world where we will expect autonomous systems to expertly perform many responsibilities previously relegated to humans such as driving a car, diagnosing disease or even performing surgery. It is in this world that we must re-create Revenue Management.

The next generation of Revenue Management systems will go far beyond the current Revenue Management systems which are all still fundamentally *Decision Support Systems* and which rely on continual human oversight.

The new Revenue Management systems will be able to perceive, learn, reason and act with predictable intelligence.

They will be able to operate in the complex and uncertain environment we face post-COVID. The best of these systems will have high degrees of independence and self-determination. Critically, they will also have the self-awareness to know

when to call for human guidance. Although these systems will have the ability to operate autonomously, they must be adept at symbiotic computing. In other words, these “autonomous” systems will be able to interface and collaborate seamlessly with humans.

In the new realm of Revenue Management, humans should be primarily focused on *strategy*. What are our goals? How do we position ourselves in the market? Where should we be growing share? Where can we be taking profit? What revenue trade-offs are we willing to make in reducing price volatility in order to gain consumer confidence?

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The new Revenue Management systems should be autonomous tacticians which can collect & analyze billions of rows of customer and competitor data. These systems should be able to faithfully execute the corporate strategy by dynamically monitoring and assessing every movement in the marketplace. They will nimbly deploy changes in pricing, availability, and merchandising which maximize revenue, profit or another strategic objective.

# Enter N2Pricing<sup>TM</sup>

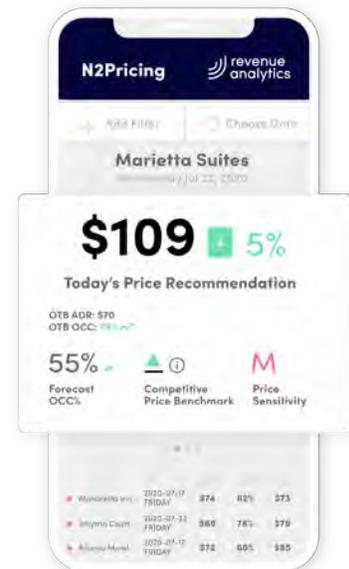
It has been a joy for me to witness my colleagues at Revenue Analytics develop this next generation of Revenue Management. This is especially true in a dismal travel market when some people are even questioning the need for Revenue Management.

The essence of Revenue Management is to sell the *right product* to the *right customer* for the *right price* through the *right channel*. That is as important as ever. We just need to do it in a manner that is far more efficient and less labor intensive. That is where N2Pricing<sup>TM</sup> excels.

N2Pricing has been specifically designed for the lean hospitality teams that will be required in the post-COVID environment.

It leverages decades of discovery in Revenue Management science by offering the same analytics engines used in the world's most successful hotel firms' Revenue Management systems.

The Revenue Management systems of the past were built for use by highly skilled analysts who would want the ability to dive into the data to make ever-more detailed analysis. On the other hand, N2Pricing is built for use by hotel managers who want greater automation, less complexity and faster reaction without sacrificing optimality.



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N2Pricing was developed with the understanding that decision makers will be stretched to extraordinary limits as hospitality firms cut staff to survive slender times. It will act autonomously, and, as necessary, provide real-time desktop or mobile alerts. It also has the ability for multi-property management to increase productivity and efficiency.

Unlike most systems that require humans to track special events which disrupt ordinary tactics, N2Pricing automatically detects booking anomalies which require special attention.



Incredible strides in technology over the past few years have enabled this system to automate many Revenue Management functions so that people are free to engage unique problem-solving skills which require a human's creativity, ingenuity, and empathy.

For hotel General Managers, N2Pricing can monitor bookings and competition with far quicker reaction times for price and inventory changes. Mobile alerts allow the GM to focus attention on hiring, training, and staffing in order to enhance guest satisfaction. N2Pricing frees the GM to perform as the CEO of the property and ambassador to the community.

For Directors of Revenue Management, N2Pricing can faithfully execute the Revenue Management strategy. This enables the DORM to devise and monitor the wide range of strategies which will be required in a spotty and uncertain post-COVID environment. It also frees DORM from time-consuming tactical tasks so that they can better collaborate with Marketing and Sales in creating demand.

Cloud-based N2Pricing is actually more *Automated Assistant* than *Decision Support System*.

It is infinitely scalable and can work equally well with a multi-national hospitality chain as it can with a single, mid-scale property.

N2Pricing could replace many older, more complex systems and offer a more nimble, mobile approach with even greater accuracy.

Perhaps even more importantly, speaking as someone passionate about Revenue Management, N2Pricing will make Revenue Management much more accessible to firms which could not previously invest the capital, skilled personnel and organizational energy required for dedicated Revenue Management.

[N2Pricing is a game-changer.](#)

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Request a personalized demo and learn how state-of-the-art pricing empowers hoteliers to consistently outperform revenue targets and save time in the process.

[Request a Demo](#)