



# Batten Down the Hatches: SHR Sets a New Course for the Future of Hotel Tech with Force10™

*Already known for its popular Windsurfer® CRS and Booking Engine, SHR, Sceptre Hospitality Resources, is investing heavily on behalf of today's and tomorrow's hoteliers to bring them the most meaningful hotel tech yet. Originating from client conversations, SHR is turning wish lists into reality via Force10—an Artificial Intelligence (AI) engine that will utilize data from proprietary applications (GRS, RMS, and CRM to begin with) to generate optimized recommendations that increase the effectiveness of the apps, and ultimately create more revenue. How are they doing it? Rod Jimenez, CEO and Co-Founder of SHR, explains the vision, logic, and timing of Force10, and what this means for the clients SHR serves, and the market at large.*

## **WHAT IS FORCE10?**

To describe it simply, it's an engine that combines SHR Hospitality Knowledge + SHR Technology + AI, powering a suite of solutions from high-level distribution to intricate guest management. It aggregates the data generated by the apps, and then feeds that data to the AI algorithms inside the engine in order to generate optimized recommendations back to the different apps. We're rolling it out over the next 18 months, starting at HITEC in June. As to the name, Windsurfer came from our early work building websites for our original client, a windsurfer shop. So, what would we call something as big as an AI-powered suite of hospitality technology solutions? If you look at the Beaufort Wind Scale, Force 10 is a gale-force storm at sea. Considering the magnitude of what we're bringing to our clients, and to the market, we feel Force10 perfectly fits the image of this storm of innovation.

## **WHAT HAD TO HAPPEN TO ALLOW SHR TO ARRIVE AT THE THRESHOLD OF FORCE10?**

About two years ago, I was worried about the fact that the Central Reservations System, CRS, is a very complex solution that is not often fairly valued. I know we're biased, but there really is a disconnect between the complexity of such a mission-critical system as the CRS, and client perceptions. To run a successful CRS platform, the system has to have ultra-high availability, be ultra-secure and yet allow for customization when needed. All of that while running the business as a SaaS. But most SaaS apps and companies are, by design, very stable, meaning no one wants to or is able to customize much of anything for its clients. Another requirement for success is that you must be innovative. And don't forget, there's the overarching market view that the CRS is a commodity as well. But here's the thing; if you ARE all those things I've listed, you can't really be a commodity. That's the big disconnect between perception and reality.

So, we decided to start bridging this gap by reaching out to a small group of core clients back in 2017 at our Innovation Summit here in Houston. Not

surprisingly, most of the conversations were all about integrations and innovations. That confirmed the need we were sensing, to not only build the link back between perception and reality, but to really push things to a new and better level for ourselves and our clients.

## **WHAT WAS THE ORIGIN OF FORCE10?**

We know that savvy hoteliers want to work with partners who are ready for today *and* tomorrow. In forming the idea behind Force10, it came down to some undeniable truths. First, in the market place right now, it's easy for hoteliers to find small, mostly regional players that inhabit the niche functionality sector. They can seem like bargains, but they are not really built to scale, to be customizable, or to handle the many key integrations that our hotel tech segment demands. So, comprehensive, scalable solutions are needed. Then second, we needed to think about which apps would be the most important to complete that picture for our clients. We quickly realized that the essential pillars on the revenue side would need to be CRS, the gateway to the world; RMS, the number cruncher, and CRM, the profiler that whispers individualized guest info to the system. Third, all of this would ideally have to be available in-house. We believed that if we could bring those three pieces together in the right way, we would be able to provide guest information to our clients on a much more intimate level, while also looking at the true value of the guest's entire stay, instead of just room revenue, and create a bigger market footprint for SHR.

## **WHY IN-HOUSE? WHY NOT JUST BE HAPPY WITH USING 3RD-PARTY INTEGRATIONS?**

That's a good question. We thought about that, but we kept coming back to control, and how best to ensure that we could bring the most meaningful and consistent results to our clients over the long-term. We realized that we would need proprietary systems because we didn't want to worry about integrating outside of ourselves, and all the natural bottlenecks that can come from going that way.



## HOW DID YOU DECIDE WHETHER YOU WOULD BUILD OR BUY THE RMS AND CRM?

We knew that we could build our own CRM, but did we have the time needed to build an RMS too? After all, we didn't want it to take forever. Thanks to our presence in Spain, David Orensanz, our Managing Director for SHR-Europe, introduced us to David Moneo, a computer scientist and engineer with a Master's Certificate in Revenue Management from Cornell. Moneo was working closely with a software group in Madrid building an RMS from scratch. When we saw the system, we verified that the application was perfectly adapted to our product vision, and our detailed audits revealed that both the applied technology and the artificial intelligence models developed were top-notch. The two Davids got together, and discussed the possibility of bringing the RMS to SHR to be fully developed. We named the app Wave™, then persuaded Moneo and the data science team to come work with us.

## HOW DID WAVE LEAD TO FORCE10?

Being an RMS, Wave is all about algorithms, so we knew that to integrate it with Windsurfer, we would need several data scientists working on it. As we were seeing the flow of data between the RMS and the CRS, we started forming a vision of something much, much bigger than any single system, or even the CRS-RMS-CRM trio.

Then we had a sort of group epiphany: What if we started solving our clients' integration and data aggregation issues by having all those applications, the CRS, RMS, and CRM, dump their data into a data lake? Then we unleash the data science team so they can create analytics to take that data, run an AI engine on it, then push recommendations back up through the applications to heighten the impact of the original data? For example, right now, the Booking Engine is based on a preconceived linear flow applied to all guests. With the addition of AI, the app will receive recommendations that are deeper and more meaningful, so rates may be raised or lowered, or pictures arranged in a particular way, or specific add-ons or promotions offered. With Force10, the AI will do that deepening for every app in the platform.

## WHO ARE THE DATA SCIENTISTS?

They are part of Algorith, co-founded by David Moneo. The group produces cutting edge AI technology in the hospitality business with a data science team, led with the collaboration of researchers Dr. Amir Atiya, Dr. Hatem Fayed, and Sandra Rizkallah. Together, they bring extensive educations and backgrounds in computer science and machine learning from the California Institute of Technology and Cairo University. We are also sponsoring an AI event for LION-APP in Italy this July focused on "Applications of Machine Learning and Intelligent Optimization to Tourism and Hospitality." One of our challenges is going to be once we get all this data in, how are we going to discover patterns more easily, and let deep learning algorithms offer their "magic"? SHR is heavily invested in discovering the most beneficial application of artificial intelligence for the field of hospitality. This is why we are planning for dev issues ahead of time, so we'll be ready.

## WHY NOT JUST ADD AN RMS AND CRM WITHOUT USING AI?

Because the big bet we're making is this: that 36 months from now, the primary UI that the hotelier will interact with will be one where they are setting their strategy by way of a format much like a questionnaire that you get from a financial consultant. You know the kind where they ask "Tell us about your risk comfort level? What are your goals? What results do you want? How long before retirement?" So, for the hotelier, that means they tell us their strategy, such as RevPAR optimization, middle of the road or highest price leader, for example. They set it up in the system and let it all run. So, the hotelier's main concern in that situation will not be the day to day, but the larger picture finally. Yet as Winston Churchill once said, "However beautiful the strategy, you should occasionally look at the results." Therefore, right now, SHR's strategy has to be much bigger than Windsurfer or any one system, but with very measurable and consistent results.

## CAN HOTELIERS STILL CONTROL THE WAVE SYSTEM ON A HUMAN LEVEL?

Absolutely. Wave is where artificial intelligence and human intelligence converge, allowing Revenue Managers to break free from solely trusting the 'black box' they are bound to by other revenue management systems. Wave has a unique Strategy Builder feature that, through a drag-and-drop process, allows the Revenue Manager to create a custom pricing strategy framework, and still leverage the power of AI. We believe this will be a great best-of-both-worlds scenario for many revenue managers.

## DO YOU HAVE ANY PROCESS IN PLACE TO MAKE SURE FORCE10 STAYS ON THE RIGHT TRACK FOR HOTELIERS?

Yes. We formed the SHR Product Advisory Board. It's made up of twelve diverse hotel business clients from around the globe, ranging from franchise, extended-stay, and hotel management companies, to luxury resort casinos and independents. Innovation for innovation's sake, in a vacuum, has never interested us. Hoteliers' needs have always shaped the SHR development roadmap. This new board continues that tradition, and will allow all of us to keep the discussion fresh in a more focused and intricate way, which includes the current SHR product roadmap, trends that we see forming, and of course, Force10.

## WHAT'S THE BOTTOM LINE ON ALL OF THIS FOR YOUR CLIENTS?

At SHR, we perceive our mandate as starting when hoteliers hire us. We know that they want us to make their lives easier today and yet, also tomorrow. When tomorrow arrives, we are expected to be ready to go. With Wave being introduced at HITEC, and our CRM, Maverick™, out soon, plus the rest of Force10 already in the works, we will be.