Executive of the Month: Shark Byte Systems leverages AI technology to maximize efficiency, revenues in the parking industry

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Michael Sharkey

New York, NY The New York Real Estate Journal sat down with Michael Sharkey, this month's Executive of the Month. Sharkey is the CEO and founder of Shark Byte Systems, Inc.

NYREJ: What are the biggest trends affecting the parking industry?
Sharkey: The two biggest trends have been the adoption of technology and a shift from long-term leases to management deals. The parking industry has historically been a slow adopter of new

technology trends. However, that changed after the 2008/2009 financial crisis when traffic fell, budgets tightened and the parking operators needed to squeeze more revenue out of their current operations and existing infrastructure. Venture capital and other equity investors saw opportunity in the sector and backed a number of tech start-ups in mobile payments, online reservations, license plate recognition, and other cloud-based solutions. I believe the next wave of innovation will be driven by the application of Artificial Intelligence (AI) and Machine Learning (ML) technologies to deliver increased efficiencies and gain insight about their customers' behavior and the history of their interactions.

The shift from long-term leases to short-term management contracts has impacted our customer base substantially in recent years and created new opportunities to work with real estate owners. Many real estate owners want to keep their options open for alternative uses/development of their parking assets, as long-term demand for parking decreases due to external forces like the impacts of ride sharing, micro-mobility trends, and public policy aimed at reducing congestion and air pollution. At the same time, they want to maximize the revenue that their parking assets generate, which is an area where AI and ML can help to understand their customers' usage patterns to set pricing and offer incentives as needed.

GarageNet Mobile Valet

NYREJ: How will Artificial Intelligence & Machine Learning impact the parking industry?
Sharkey: Like with many industries the impact of these technologies will be big and wide-ranging, just like the Internet and social media have impacted so many aspects of our lives today. AI and ML will play a major role in most aspects of parking operations, from automating tasks currently done by humans such as issuing and cashiering tickets to improving the customer experience through enhanced marketing campaigns and programs to increase customer loyalty. We will see predictive analytics to forecast vehicle traffic given multiple factors, such as day of the week, time of day, and weather conditions, as well as dynamic pricing offerings to increase drive-ins when inventory dips below a desired level. We are still in the early innings in terms of the roll-out of these technologies, but I can assure you that they are here to stay and will provide valuable enhancements over time. We'll see continued advancements during the next decade with technologies like AI, ML, and 5G networks converging together in connected cars and smart cities setting the stage for other exciting new uses.

NYREJ: What is the GarageNet Video Analytics solution?
Sharkey: GarageNet Video Analytics is a cutting-edge video-based SaaS solution built on AI and ML to identify every vehicle that enters/exits a parking facility. As a vehicle enters or exits a parking facility, standard security cameras capture the event and the video analytics algorithms identify key vehicle attributes such as make, model, color, license plate, and direction and then automatically generate a printed or virtual ticket. It does the job of issuing tickets faster and more accurately than

humans, increases the length of stay by capturing the exact entry time, and can reduce staff and slippage, all of which result in increased revenues. Video Analytics is fully-integrated with our GarageNet revenue-control software suite and white-label web portal that enables retail customers to pay for parking, make future reservations, and request their vehicle from any smartphone without having to download an app. GarageNet Video Analytics is a win-win for both real estate owners and retail customers.

GarageNet Video Analytics

NYREJ: What drove Shark Byte to create GarageNet Video Analytics?
Sharkey: After developing a License Plate Recognition (LPR) solution we realized the inherent limitations of the technology. Although the cost of implementing LPR technology has decreased over the years and performance has improved, the ROI is still not compelling enough for real estate owners to invest in this technology on its own. To improve upon the concept we developed additional software algorithms to capture additional vehicle attributes and made the vehicle identification much more reliable and accurate.

NYREJ: How has the outbreak of the coronavirus affected your business?
Sharkey: Being a technology-focused company helped us in a number of ways. We made the decision to have our staff work remotely before governor Cuomo announced the statewide stay at home order, so we were able to keep our support operations running smoothly transitioning to the work from home model. The pandemic also increased interest in ticketless and frictionless parking experiences which our GarageNet Video Analytics and SpotShark mobile payment portal make possible, so we have been able to pivot and focus on providing the solutions our customers need during the pandemic and will continue to do the same post-COVID.

NYREJ: What is Shark Byte working on now?
Sharkey: We are building on the success of GarageNet Video Analytics and SpotShark, our Web-based payment and reservation portal, to prepare for the post-COVID future. We are expanding our frictionless, ticketless, and touchless offerings where we see continued growth in demand going forward, as well as pursuing additional integrations with PARCS vendors to expand our GarageNet Video Analytics market share.

NYREJ: What do you see as being the biggest challenge for owners of parking facilities?
Sharkey: Information. Many real estate owners rely on operators to provide reporting on key performance indicators who typically provide a summary of the previous month's activity with a package of canned reports (vehicle traffic, breakout of transient and monthly revenues, average lengths of stay, etc.). But, the reports are often limited and there is no independent means of

verification of that information. That's where GarageNet Video Analytics really shines by providing timely and verifiable traffic in/out and length of stay data, which can be run against the facilities rates as a check of the operator's reports. GarageNet also provides ad-hoc reporting capabilities to allow for additional investigation into the data. The benefits of knowing with absolute certainty when retail and monthly customers enter and exit combined with information about their vehicle can be used to determine real-time inventories, offer dynamic pricing based on those inventores, customize marketing messages, and promote related partners on an individual basis.

NYREJ: Why should parking facility owners consider GarageNet?
Sharkey: The parking industry has embraced prepaid reservations, license plate recognition (LPR), and ticketless parking technologies. However, these are not convincing enough propositions on their own. By applying our 20 years of experience in developing parking solutions and our expertise in AI and ML, we magnify the value and the resulting ROI of these technologies. Plus, our no-CapEx model with full hardware and software subscription offerings makes deploying our solutions easy and affordable. Our GarageNet solutions take existing products and services that are nice to have and supercharge them into a must have integrated solution.