

# Tangam Systems and AI Foresight & Innovation in Gaming Optimization



## Q&A Interview

September 21, 2023

We sat down with Maulin Gandhi, President of Tangam Systems, to explore the rising significance of artificial intelligence globally. What makes this conversation even more fascinating is Tangam's pioneering role in harnessing AI nearly two decades ago, long before it became a trend, and its trailblazing journey in the gaming industry. Maulin, who has been with Tangam since its inception, holds both a Bachelor's and Master's degree specializing in Artificial Intelligence from the renowned Center for Intelligent Machines at McGill University in Montreal, Canada.

*Welcome, Maulin. It's a pleasure to have you here today. Could you share with us the story of how Tangam Systems got its start with AI in the casino industry, long before it became a popular trend?*

**Maulin Gandhi (MG):** Thank you for having me. Our journey at Tangam Systems is quite a unique one. We entered the casino industry almost 2 decades ago when AI wasn't the buzzword it is today. Back in those early days, we recognized the untapped potential of AI, especially in gaming. Our first attempt was to leverage AI and Machine+ Learning to automatically analyze vast amounts of video surveillance data from table games. Our goal was to drive operational efficiency with more accurate player rewards, improved dealer productivity, and fewer dealer mistakes. This laid the foundation for what would become a transformative journey.

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*That's intriguing. So, how did Tangam progress from computer vision to its current focus on prescriptive and recommendation-driven analytics?*

**MG:** Well, we quickly realized the potential for the data was much greater than just being collected.



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We understood that it needed to be actionable to truly make a difference. That's when we decided to shift our focus towards creating purpose-built business intelligence tools specifically tailored for casino table game operators. Once again, we were ahead of the curve. While others were busy developing visualization tools, we were already working on developing algorithms capable of not only analyzing the data but also providing precise recommendations to casinos on how to optimize their operations. This marked our transition into the broader category of recommendation-driven and prescriptive analytics.

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*Our deep understanding of the industry helps bridge the gap between data analytics, technology and real-world casino operations.*

*How did your clients initially respond to this shift in approach?*

**MG:** It wasn't an easy path, I must admit. We had to work diligently to earn the trust of our customers and demonstrate how our solutions could drive their businesses forward. We referred to this process as "operationalizing our software," which involved a tremendous amount of effort to ensure that our software was not just a tool but an integral part of our clients' operational success.

To support our clients globally, we have a team of some of the most talented individuals from in the casino industry. We work closely with our clients to ensure they get the maximum value out of their investment in our software. Our deep understanding of the industry helps bridge the gap between data analytics, technology and real-world casino operations.

*That's an inspiring journey indeed. So, what guiding principles have shaped Tangam Systems throughout this evolution?*

**MG:** Our philosophy at Tangam Systems is underpinned by a commitment to making complex data actionable for ordinary users. We believe in empowering managers to effectively run their businesses and drive performance improvements, putting data-driven decisions within their reach.

Our dedication to a client success culture is a defining aspect of who we are. We understand that our success is intricately linked to the success of our clients. Every product we create, from TableEye to TYM and SODA, is designed with the aim of delivering tangible value to the casinos we serve. This client-centric approach drives us to continuously innovate and refine our solutions.

Moreover, innovation is not just a part of our past; it continues to define our future. The spirit of invention is at the heart of Tangam's team, and it's what propels us to develop breakthrough products that are the first and only of their kind in the gaming industry. We remain dedicated to pushing the boundaries of what's possible and delivering excellence to our clients.

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***That's a fantastic perspective. How did you then make the transition from Table Games to Slots?***

**MG:** It was indeed a bold move, one that came with inherent risks as we took on electronic gaming. However, while we expanded our focus, our fundamentals and core philosophy did not change.

Our journey into slots optimization began several years ago, driven by a strong demand from our existing partners. They had been impressed by the results we achieved with our table games solutions and saw the potential for us to do the

same in optimizing their electronic gaming footprint, encompassing slots and ETGs.

Recognizing the importance of offering a comprehensive solution to optimize the entire gaming operation, we accelerated our development efforts in the slots arena. It had always been on our roadmap to provide a holistic approach to gaming optimization, not limiting ourselves to just one segment.

In a similar fashion to our approach with table games, we began by bridging the gap between what operators believed they needed and what they actually required to succeed. It was during this process that SODA, our innovative slots optimization and data analytics software, was born.

I'm proud of the hard work that our teams put in to successfully closed this gap and have gained the trust of numerous large and chain operators who now utilize our full software suites to enhance their gaming operations. This journey into slots was indeed a risk, but it's important to highlight that our commitment to

delivering tangible value and pushing the boundaries of what's possible in the gaming industry remained constant.

***As we look ahead, how do you envision Tangam Systems and AI shaping the future of the gaming industry?***

**MG:** When we peer into the future of casino operations, we see a world where AI and innovative concepts are seamlessly integrated into multiple facets of the industry. However, let's shift our perspective and consider the impact on the players themselves.

For operators, the ultimate goal has always been to offer a more personalized and enjoyable experience to their guests. Picture this: you walk into a casino, and the games, promotions, and incentives are tailored precisely to your preferences. It's a level of personalization that has the potential to revolutionize the casino experience.

To make this vision a reality, multiple aspects come into play. Marketing teams need to ensure that the right promotions are sent

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to the right players. Operations teams must ensure that the right products are available on the gaming floor, and these products are thoughtfully merchandised to enhance the customer experience.

However, achieving this level of personalization and operational efficiency can be a daunting and costly endeavor without the right technology. The critical question then arises: how can casinos automate their operations to cater to all their guests at a level akin to the top-tier guests, all in a scalable and cost-effective manner?

When you couple the right product, the right technology partner, and a forward-thinking culture, you can truly transform casino operations. It's crucial to emphasize that AI alone is not the sole game-changer. The synergy of these elements working in harmony holds the potential to reshape the future of casino operations.

Technology doesn't replace humans; instead, it dramatically enhances human productivity, enabling us to achieve more with the same, or even fewer resources.

At Tangam, we stand at the forefront of this transformation, playing a pivotal role in shaping that future of the gaming industry.

***As we've already referenced a few times, AI is now the hot trend within the gaming industry and beyond. How does Tangam differentiate your AI and insights? What is so special about what you're bringing to the table?***

**MG:** The complexity of the problem grows exponentially as you delve deeper into solving it. Creating a recommendation engine that merely identifies opportunities isn't the real challenge. Casino operators already have a good sense of which games are performing well and which are not. What sets us apart is taking it to the next level.

We not only provide recommendations but also explain the underlying factors driving those recommendations. We estimate the potential profit increase that a change could bring, and once the change is implemented, we measure the actual improvement relative to the expected one.

Our model accounts for various factors like dilution, cannibalization, and player behavior to comprehensively address the issue and provide operators with insights they might not have considered. It's about delivering answers that operators are truly seeking, not just confirming what they already know.

While it's easy to say that operators should apply market basket analysis and optimize their floor layout, the real complexity lies in making precise product decisions and defining the constraints involved.



***At the core of our mission is the commitment to provide practical solutions that deliver tangible value, substantiated by real results, rather than relying on buzzwords or hype!***



We have successfully accomplished this in the realm of table games using our TYM product, and we are excited to bring prescriptive analytics to transform slot operations as well.

This is where partnering with Tangam truly shines. We have a strong track record of success in innovation. At the core of our mission is the commitment to provide practical solutions that deliver tangible value, substantiated by real results, rather than relying on buzzwords or hype!

***Wow, that sounds really interesting! How can casino operators check out your optimization software?***

**MG:** In a few weeks, Tangam will be at G2E in Las Vegas at the Sands Expo at booth 1830. This will be the first industry event where operators can book an in-person demo and get a sneak peek of our new AI Insights Engine for SODA among other updates we've rolled out within our casino optimization product suite. Visit our website to book a demo either at G2E or online if you're not attending the show at [www.TangamSystems.com](http://www.TangamSystems.com).

## Join Us at G2E As We Unveil a New AI Insights Engine in SODA

The New AI Insights Engine automates performance results evaluation for executives, transforming the approach to troubleshooting and optimizing gaming performance.

