Smartronix Transforms a Traditional Hosting Practice to Bring Next-Generation Cloud Managed Services to the Public and Private Sectors

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– Anthony Vultaggio, Chief Technology Officer

Moving to the AWS Cloud and Building on Decades of Experience

For organizations like governmental agencies, healthcare companies, and financial services firms, success depends on the organization's ability to use technology effectively and at scale while staying secure. With decades of experience providing security-conscious organizations with traditional IT hosting and network services, Smartronix understands how to build and support complex enterprise deployments.

"Throughout the 20+ year history of Smartronix, we've always been involved in the delivery and management of enterprise IT services," says Robert Groat, executive vice president of technology and strategy at Smartronix. "In the late 1990s, we helped stand up what became the Marine Corps' Network Operations Security Command, where we provided global network operations and cybersecurity capabilities for the global Marine Corps' enterprise network. Our culture and history stem from the ability to provide global operations support to our customers at scale."

While the company had built a successful traditional hosting business, the team realized that to support enterprise customers effectively, building cloud technology expertise would be critical. Smartronix also recognized the value it could drive by creating a cloud-based managed services business to meet the unique needs of both its traditional public sector customer base and its burgeoning commercial sector practice.

"We began by developing our own offerings and helping organizations consume AWS services by building out critical infrastructure, such as Recovery.gov and Treasury.gov, some of the first properties the US Federal Government deployed on AWS," says Groat. "In addition to helping our first customers on AWS build infrastructure, we developed the capabilities to be able to most effectively operate, manage, and secure the critical infrastructure we were building on a 24-7 basis. Building a managed service practice on AWS was a natural evolution for us. As we introduced new technologies to customers, we were also the best prepared to securely and effectively operate it."

The company's experience supporting mission-critical workloads for the public sector space became critical as it set out to meet the needs of its commercial sector. "For the commercial space, we found the primary gap to be their knowledge and experience in securing cloud environments effectively," says Groat. "They needed a partner who could understand the nuances of security and compliance in the cloud, and who could provide the technical depth and expertise to not only control and mitigate risk, but to take advantage of AWS and third-party tooling to improve their security posture."

About Smartronix

Smartronix is an end-to-end solutions provider with a dedicated team of cloud professionals. The company's Cloud Assured team specializes in solutions that allow its customers to unlock the potential of the cloud.

With services ranging from strategy, design, implementation and managed services, the expert staff and real - world experience of the Cloud Assured team helps them become a trusted partner for an organization's cloud initiatives.

- *AWS Partner Network (APN) Premier Consulting Partner*
- *AWS MSP*
- *AWS Competency Holder in:*
    - *DevOps*
    - *Migration*
    - *Security*
    - *Government*
    - *Nonprofit*
- *AWS Public Sector Partner*

As the company's AWS capabilities matured and its relationship with AWS grew, it became one of the first partners to join the [AWS MSP Partner Program](#). "We were one of the first APN Partners and developed a longstanding relationship with AWS," says Groat. "As an [AWS Partner Network Premier Partner](#) since the designation's founding, we've been able to tap into key resources on the AWS side, such as APN program resources and AWS product team resources, to help us as we continue to mature our managed service capabilities."

Becoming a Trusted Advisor Throughout the Cloud Lifecycle

Addressing the full cloud lifecycle for customers is at the heart of Smartronix's AWS practice. "We help organizations at any stage of their lifecycle," says Groat. "Our business is approximately 15 percent strategy planning, 40 percent design, migration, and development, 30 percent operations, and 15 percent resell. We feel that resell is an important function of our MSP practice because we can add valued services around cost transparency and optimization. The strategic planning side leads to new opportunities to support migration, development, and operations."

Groat believes a next-generation MSP must also take on a trusted advisor role in helping the customer adapt and evolve culturally and technologically to take full advantage of the cloud. "An organization that wants to consume cloud is confronted with where to start, how to build foundational capabilities, how to transform the organization culturally, how to utilize new capabilities, and how to operate, manage, and secure infrastructure and applications on AWS. It's the entire cloud lifecycle which can be fairly disruptive to an organization that may not yet have embraced that mindset or culture internally," says Groat. "Our goal is to help transform the way our customers think about IT and deliver IT services."

Building an Automation-First Managed Service Practice

At the heart of Smartronix's next-generation managed service practice is security, automation, a focus on market research, and an ongoing effort to pull best practices and learnings from hundreds of clients into new engagements.

"Next-generation MSPs look at IT service delivery through a cloud-native lens," says Anthony Vultaggio, chief technology officer at Smartronix. "The software-defined architecture of the cloud enables the core components of modern IT services, including infrastructure automation, application modernization, and operations optimization. Underpinning these three components is the fundamental principle of unifying the entire service lifecycle via code, meaning that solutions are built using repeatable automation capabilities. Services are isolated for independent availability, elastic scalability, and have built-in telemetry for security and operations support. Operations and security capabilities are enforced through "Policy as Code" with a fundamental shift in event- or attribute-based autonomic response."

To help customers develop with more agility and shift operational responsibilities to AWS, Smartronix has taken a proactive approach to serverless technology, both in its professional services offering and within the tooling it delivers to MSP customers. "Many of our customers are looking to containers and microservices capabilities to enable a modern application development approach," explains Vultaggio. "We help customers look at their application portfolio and recognize what applications we can help refactor to this more modern approach to development and application service delivery."

Smartronix believes that the power of operational optimization through automation can help customers get the most significant return on their cloud investment. For example, the company has developed a pattern it calls event/attribute-based management in which it enables customers to automate how security and compliance policies are enforced. Customers apply their subject matter expertise in a more effective way where their knowledge and guidance becomes codified and applied to implement policies deemed necessary automatically. The goal is to help users free up their time to focus on value-added business activities while building consistent and reliable event management practices. "Our approach to policy enforcement is, 'Let's help you do it once and then let's make it highly repeatable and highly scalable through automation,'" says Vultaggio.

"Next-generation MSPs help organizations transform from mindsets focused on siloed responsibilities to integrated capabilities so that new technologies can be more rapidly adopted," explains Groat. "Operational toil and manual burden are removed via automation and autonomic response."

Smartronix evolves its own tooling and practices and often experiments with new technologies. "We use AWS-native tooling and capabilities as much as possible. It is incumbent upon us, as a next-generation MSP, to look at the entire market of tools and capabilities and understand how those tools can be applied to customer use cases," says Vultaggio. "We're talking about not only AWS tooling and Smartronix-developed tooling, but also taking best-of-breed capabilities across the AWS partner community and figuring out how we can implement and integrate those solutions into our MSP practice."

Smartronix takes advantage of many AWS Technology Partner solutions, such as Trend Micro for continuous compliance and cloud protection, IBM BigFix for patch management, Sumo Logic for log management and analytics, CloudCheckr and CloudHealth Technologies for cost management and cloud optimization, and Tenable for continuous network monitoring.

Bringing Value-Added Capabilities Through AI and ML

Smartronix has hundreds of active engagements per year and is seeing tremendous growth in the areas of strategy and development. "I believe a key differentiator moving forward will be our ability to design and develop solutions on a modern application framework rapidly in AWS and help customers recognize and reap the transformative benefits of AWS on a much greater scale," says Groat. "On the operations side, we're continuing to invest in services and capabilities that allow us to scale and enable us to have autonomic, intelligent responses to a range of customer requests."

One of the top areas the Smartronix team is currently investing is how to take advantage of artificial intelligence (AI) and machine learning (ML) tooling in its own internal operations and MSP services to be able to identify patterns and anomalies that can help both Smartronix and its customer base learn more about how applications and services are being used and areas for optimization and improved security.

Allergan Builds and Manages its First Cloud-Native Application, TrueTear, on AWS with the Help of Smartronix

Allergan is a global pharmaceutical company focused on developing, manufacturing, and commercializing branded pharmaceutical, biologic, surgical, and regenerative medicine products and devices for patients around the world. It markets a portfolio of brands and products for the central nervous system, eyes, medical aesthetics and dermatology, gastroenterology, women's health, urology, and anti-infective therapeutic categories.

Allergan has invested billions of dollars in new treatments for the most prevalent eye conditions. To tackle the challenge of dry eyes without the use of drops or other medicines, Allergan developed the TrueTear Intranasal Tear Neurostimulator, an electronic medical device with the ability to connect to a user-friendly mobile application via Bluetooth. For the TrueTear mobile app to succeed, the team faced many challenges, including compliance, security, regulation, and ongoing application management considerations.

Having migrated hundreds of public-facing websites and supporting systems to AWS with the help of Smartronix in 2014, the Allergan team already understood the many benefits of running mission-critical workloads on AWS and leaving the management of their applications to the experts at Smartronix. "We knew Smartronix had deep experience working with heavily regulated industries, and the fact that they're an AWS Premier Partner, AWS Managed Services Provider Partner, and multiple AWS Competency holder is a big deal for us," says Mike Rogers, product manager for the TrueTear mobile application.

Allergan turned to Smartronix to assist with the implementation, architecture, and management of the TrueTear backend infrastructure on AWS. After completing the app, the Allergan team worked with Smartronix to develop a maintenance plan and official managed service process.

The TrueTear team has pioneered Allergan's entry into the world of connected devices. "We look forward to leveraging this experience as we build our broader strategies for digital health and accelerating new therapies to market with innovative technologies," says Bill Thornton, vice president of IT research and development at Allergan. "Our relationships with Smartronix and AWS will be a key component of our digital strategy in R&D to unlock the value of real-world evidence, data and sensors, and digital biomarkers as we move 'beyond the pill' to disrupt the current healthcare paradigms."

Learn More

Read the full Allergan & Smartronix case study.