

Accelerating Broadband Efficiency with B/OSS Transformation

By: Scott St. John - Pipeline

Being a Communications Service Provider (CSP) is an incredibly complicated business. Typical broadband operations can incorporate a proliferation of devices, service packages, network technologies, and support systems. In fact, a single service provider may have hundreds, if not tens of thousands, of intertwined systems. All of which need to operate harmoniously to meet customer demands. I've seen the system maps. They're not pretty. Add to that an environment of constantly and rapidly evolving underlying technologies, mergers, acquisitions, regulatory frameworks, and things can get really ugly, fast.



This state of perpetual flux creates a challenging operational environment, but the multi-billion-dollar opportunity to own the customer relationship and the network that connects them makes it worth the effort. But, if you need an added incentive, federal funding supports the expansion of broadband services which is growing the market size and opportunity significantly. For example, the <a href="BroadbandEquity">Broadband Equity</a>, Access, and Deployment (BEAD) program in the United States is providing over \$40B to do just that. Last month the United States Congress introduced a new bill, the <a href="Streamlining Program Efficiency and Expanding Deployment for BEAD Act">Streamlining Program Efficiency and Expanding Deployment for BEAD Act</a>," dubbed "SPEED for BEAD," to make the funding process even more efficient. The opportunity is clearly there, and it's ripe for the picking. The only question that remains is how to overcome the challenges and complexity that plague so many fiber and fixed-wireless companies today.

Even well-run CSPs contend with tight profit margins and fierce competition - in an industry that is becoming increasingly commoditized. To succeed, they must not only transform but do so with efficiency at the forefront of their transformation. Fortunately, a whole host of technologies, solutions, and platform providers have risen to the challenge. But this can be a double-edged sword. Adding more systems into the mix, all of which must be customized and integrated, can add more complexity or worse, things can start to break. To tame the complexity, it takes more than best of breed products. It takes a seasoned team who have been there and done that. It takes a brain trust, backed by best-of-breed solutions, and who possess a deep understanding of CSPs unique business.

I recently had an opportunity to connect with the executive team at <a href="Constellation SaaS">Constellation SaaS</a> including Robert Ladd, Jay Carlson, Charlotte Field, and Del Guynes to discuss how broadband service providers can tame the complexity of modernizing their B/OSS systems and evolve their back office. And they know a thing or two, because they've seen a thing or two. We'll get to that in a minute. Constellation

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SaaS is a newcomer that made its debut at Metro Connect in Fort Lauderdale, Florida in February of this year. Constellation SaaS was formed to combine a wealth of experience with large-scale transformation projects and best-of-breed telecommunications solutions. And they have one thing in mind: efficiency. Constellation SaaS solves the pain of scaling by harnessing over 100 years of collective telecom experience, with proven products to reduce the complexity of the back office and accelerate operational growth. But their secret sauce lies within their own unique experience. It encompasses over a century of successes and failures to develop best practices from which its customers can benefit.

"We're experts at changing flat tires on moving cars," Jay Carlson told *Pipeline*. "We know how to solve the problems broadband providers are facing because we've lived it, and we've developed a repeatable process that provides predictable outcomes."

## Connecting the Dots with Constellation SaaS

Shortly after 9/11, the State of Illinois was in a scramble. Illinois has one of the largest state governments and economies in the United States, dwarfing even that of some small countries. At the time, the state had nearly 50 state agencies, over 100,000 employees, and nearly 10,000 systems it had to unite to comply with emerging regulations and to create a common governance architecture and network infrastructure. And these weren't just government offices such as the Department of Revenue and State Police. It also included energy and critical infrastructure, data centers, disparate networks, nuclear power plants, research institutions, and universities just to name a few. The state turned to Jay Carlson and Del Guynes who were not only able to rise to the challenge, but they were also able save the state nearly \$3B in capital and operational expenses in the process.

Fast forward to 2016, when Charter Communications completed its acquisition of Time Warner Cable and Bright House Networks and combined them under the <u>Spectrum</u> brand. The acquisition formed one of the largest service providers within the United States. It also created a quagmire of networks and systems that had to be consolidated. This included multiple home-grown provisioning systems, Sarbanes-Oxley (SOX) compliant and non-compliant Enterprise Resource Management (ERP) systems, Business and Operational Support Systems (B/OSS), dozens of network and domain management systems and more. Even instances when the acquired companies were using the same systems, they were using them in different ways which further added to the complexity.

The responsibility to tackle this monumental challenge fell on the shoulders of the Charter Communications' technology team. That team just so happened to include Robert Ladd, Jay Carlson, and Charlotte Field who served as Charter's Group Vice President of IT Strategy & Planning, SVP Information Technology & Chief Information Officer, and Senior Vice President of Applications Platform Operations respectively. Ultimately, along with others at Charter who have since joined Constellation SaaS, they were able to successfully and efficiently consolidate to just one provisioning system, a single SOX-compliant ERP system, a simplified B/OSS architecture, and flattened network infrastructure. This was no small task.

"The road to transformation is littered with white crosses for CIOs who attempted to consolidate complex systems like ERP," Carlson added. "It's a lot like building the Hoover Dam, you first have to divert the water - which is an engineering feat in and of itself - before construction can begin. And I'm happy to report we were able to accomplish it successfully with absolutely zero impact to Charter's customers in the process." Guynes added that they achieved zero impact to constituents of the State of Illinois during their large-scale transformation as well.

In 2023, the team banded together with other key industry experts and Charter stakeholders, such as Stephanie Mitchko-Beale who served as Charter's executive vice president and chief technology officer, to form an information technology consultancy to help broadband service providers scale their business.

"We help broadband providers reduce the pain of scaling by simplifying complexity of B/OSS deployment and increasing the velocity of operations as a result," Ladd told *Pipeline*. "Fiber providers in particular must address these challenges before the pain turns into real problems, such as after orders start stacking up."

"Interestingly many fiber and fixed-wireless providers are still experiencing the same challenges, such as managing the customer experience, order fulfillment, and systems complexity," added Carlson. "We've solved these challenges and help them do the right thing the first time, out of the gates." Constellation SaaS is doing that with a tailored suite of best-of-breed B/OSS products combined with its own innovative technology to create greater operational agility and efficiency.

<u>Constellation SaaS</u> now combines the team's collective experience, with pre-integrated telco-specific products, and streamlines them together into what it's calling a "telco-in-a-box" offering. It integrates with Atlas Digital Group to enable superior, personalized omnichannel sales experiences, backed by robust business intelligence and seamless integrations with over 40 different systems.

"We are committed to delivering an innovative and scalable platform that empowers service providers to accelerate growth, simplify their business, and drive return on investment," CEO of Atlas Digital Group, Mark Mihalevich told *Pipeline*. "Atlas CORE is a nimble solution designed for sales performance, enabling an average improvement of 3 to 5 times in sales conversion. The integration with Constellation SaaS provides the end-to-end continuity service providers' back office requires to elegantly convert more orders into customers."

The Constellation SaaS offering also leverages Ni2 for unified network inventory management for inside and outside plant, geographic information systems (GIS) and asset management through a digital twin of the physical and logical infrastructure that enables address validation, serviceability, and service design. Then it uses Constellation SaaS's proprietary data plane for data normalization, compliance, security, management, and order decomposition. Then it leverages Nokia's Altiplano Access Controller for service activation.

"Integration with our Altiplano Access Controller enables Constellation SaaS clients to take advantage of Nokia's AI-driven operations by combining AI and smart analytics," Nokia's Vice President of Broadband Partners, David Eckard added. "This empowers operators to detect network anomalies faster, anticipate service-affecting issues before they occur, and improve network utilization." Constellation SaaS then leverages CSG for billing, field service management, payments and lifecycle CRM capabilities to complete the full ecosystem.

"CSG's SaaS solutions are part of the engine that powers Constellation SaaS, enabling fiber providers to engage customers in the moments that matter the most," Reid Jenkins, vice president of strategic business at CSG added. "With these capabilities, providers can drive real-time, meaningful interactions that build trust and boost the customer experience. At the same time, they help create better outcomes for both customers and employees, allowing providers to monetize their investments and drive stronger ROI."

The Constellation SaaS solution also includes APIs to enable flexible integration with other third-party systems such as business intelligence, ERP, cybersecurity, and reporting.

## Stellar Alignment

When the right combination of experience, technology, and solutions come together it's time to take notice. Transformation is rife with pitfalls, obstacles and typically opposed by naysayers. The Constellation SaaS team possess the unique understanding of CSPs complex business and unique organizational challenges, because they've lived and breathed it for decades. They know what works, and what doesn't, so they can help simplify your B/OSS, evolve your back office, and accelerate growth. Large-scale transformation projects are complicated. It's good to know organizations like .atio Constellation SaaS are there to help you navigate your transformation journey.