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No-code Orchestration: The Future of OSS Automation

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Digital transformation empowers operators with next-generation service delivery and autonomous, intent-driven networks. But this industry shift presents daunting challenges. As CSPs become digital service providers, they must transform their monolithic operations support systems (OSS) and retool their network architecture to satisfy the demands of the modern market.



These technical and operational challenges result from the extensive manual coding required to implement traditional BSS and OSS tools, including end-to-end service orchestration, network provisioning, service monitoring and service assurance. To address these challenges, operators must integrate intelligent OSS solutions that automate service lifecycle management and minimize the human intervention needed for provisioning functions across multi-vendor environments.

As over-the-top (OTT) services erode revenue and bandwidth becomes commoditized, managed overlay services will prove essential to profitability growth and a positive return on investment (ROI) for 5G infrastructure and wireline alike. An automated, vendor-agnostic OSS stack can empower operators with autonomous networks that can deliver emerging services profitably. Through an intelligent OSS solution based on TM Forum's standards, operators can drive positive business outcomes and automate onboarding, service orchestration and provisioning for enhanced network flexibility, agility and operational cost-savings.

Legacy OSS: a barrier to autonomous networking

Autonomous networking marks an evolution in the telecom industry, providing high operational efficiency without human intervention in business operations and network functions. This networking shift is a key facet of digital transformation. In turn, OSS tools must evolve through automation to keep pace. As operators strive for autonomous networks, they are struggling with inflexible, time-consuming and costly legacy OSSs. Legacy OSS presents a substantial barrier to digital transformation, hindering positive business outcomes and revenue enhancement in novel and existing business lines. Legacy OSS cannot cater to real-time customer demands, burdens operators with high operational costs and is dependent on custom code.

Operational silos have risen as a result of layer upon layer of new services placed upon legacy systems, with the effect of impeding timely access to data and timely service delivery. As the networks become more heterogeneous and software-oriented, the flaws of siloed OSS magnify. With network complexity increasing across multi-vendor environments, manual OSS intervention is proving too costly and time-consuming to contend with the service lifecycle demands of the modern marketplace. These shortcomings cause delayed time-to-market and consequently delayed time to revenue, as traditional OSSs may take years to implement.

To facilitate new digital services and experiences, operators need autonomous networks that adapt to customer demands and enable real-time customer engagement through agile OSS automation, streamlining customer experiences across all channels and reducing operational costs. Service lifecycle speed and customer experience are paramount to successful digital transformation and continued profitability, and automated OSS solutions such as no-code orchestration will play an integral role in satisfying these new network needs.

Optimized business outcomes through no-code orchestration

To eliminate operational inefficiencies and service delivery delays across multi-domain networks, operators need vendor-agnostic, cloud-native, standards-based OSS solutions that automate end-to-end service orchestration. No-code orchestration is a vital solution to fulfilling these requirements and addressing the myriad shortcomings of legacy OSS systems. Through this centralized OSS tool, operators can speed time to market and implement within weeks instead of years.

No-code orchestration empowers operators with enhanced network agility, automating the fast delivery of new services and vertical market applications. Additionally, it is scalable according to evolving business needs and real-time market demands. This automated solution's primary benefits include accelerated time to market for new and existing services, lower operational expenses, enhanced customer centricity and heightened network flexibility and agility. Through the benefits of no-code orchestration, operators can eliminate siloed OSS infrastructure and merge the service lifecycle processes of numerous technologies under one automated platform.

Accelerated time to market for new and existing Services

5G monetization is a key challenge for CSPs. Through the use of a no-code orchestration system to achieve faster time to market for new and existing services, operators can realize the revenue streams of 5G technologies more quickly than ever. No-code orchestration facilitates 5G monetization through standards-based, open APIs adaptable to internal systems and external applications. Operators can monetize their networks through these features and keep pace with the industry shift toward open ecosystems, enabling efficient use of digital infrastructure in multi-vendor environments. Through an accelerated time to market for services, no-code orchestration finally empowers operators with the revenue streams needed to obtain a return on their substantial infrastructure investment.

Lower operational expenses

With no-code orchestration's enhanced agility, operators can reduce operational expenses through automated service lifecycle management. A vendor-agnostic solution offers multi-vendor, multi-network support. Additionally, no-code orchestration improves transaction efficiency in the fulfillment processes of those technologies, reducing operational costs on an annual basis. Through agile automation, no-code orchestration ultimately eliminates the manual coding and intervention of legacy OSS systems, thereby reducing labor costs while accelerating time to revenue for next-generation services.

Enhanced customer centricity

Until recently, optimization of the customer experience (other than service level agreements (SLAs)) was not a priority in the telecom industry. Now, customer experience and self-serve are a necessity to improve business outcomes, reduce churn and potentially upsell for more margin-rich services. Through a simplified visual interface, no-code orchestration helps operations and network engineers create service workflows for provisioning services or update services without the need for intensive manual coding. This yields the benefit of minimizing developer workloads and providing a more agile response to market demands. Furthermore, no-code orchestration enables automated inventory updates and enhances customer experience by reducing the fulfillment errors associated with manual coding and intervention. In today's telecom landscape, exemplary customer experiences are vital for positive business outcomes and continued growth. Improvements in this area result in substantial monetary gains, with [some studies](#) forecasting over a billion dollars of added revenue with even a one percent improvement in customer experience.

Heightened network flexibility and agility

Due to its inflexibility, legacy OSS struggles to contend with service lifecycle management across complex multi-vendor environments. With its open API, standards-based approach, no-code

orchestration empowers operators with enhanced flexibility to meet customer demands for emerging services and applications, optimizing interoperability in any system or network element. This network flexibility helps operators implement a proactive service strategy, as real-time data offers automated platform monitoring and enhanced visibility to optimize business functions and subsequent outcomes. Through enhanced flexibility, no-code orchestration simplifies business operations and ensures efficient resource use across multi-vendor environments. Speed and agility are the deciding factors in today's markets, and automated OSS solutions integrating zero-touch provisioning and no-code service orchestration empower operators with the agility and flexibility needed to sustain continued growth in emerging markets.

Achieving digital transformation with automated no-code orchestration

An intelligent OSS stack addresses the pain points of operators amid digital transformation, facilitating orchestration agility and accelerating time to market for next-generation services while enhancing existing services. In our on-demand digital world, customers have a wide range of service options and insist on instant delivery of those services. Operators cannot risk delays for new services, especially as they increasingly compete against OTT platforms. Operators must transform their OSS stacks to successfully deliver emerging services and achieve true digital transformation through autonomous networking. Automated no-code orchestration is an essential component of this digital transformation, offering myriad benefits that address the shortcomings of conventional OSS systems and help operators secure optimized, long-term business outcomes.