

THE CHALLENGES FACING TODAY'S COMMUNICATION SERVICE PROVIDERS (CSPS)



The telecommunications industry is undergoing a rapid transformation. As innovation, new service models and rising customer expectations reshape the technology and business environment, communication service providers (CSPs) are grappling with urgent operational challenges. These include:

- **Taking complexity out of service assurance processes** while increasing speed and efficiency. A faster pace of technology innovation, digitalization, and market competition calls for greater agility and automation to streamline and accelerate routine tasks.
- **Rationalizing diverse and dynamic technology ecosystems**, using open standards to ease integration, support the move to the cloud, and drive convergence across enterprise IT and network operations.
- **Breaking data silos** to enable artificial intelligence (AI), analytics, and optimal decision-making by both human operators and machine-to-machine interactions.

For over 40 years, BMC has worked with the world's top CSPs as a key technology provider for their IT domain. More recently, we have introduced vertical solutions tailored to the unique needs of the industry, in which operators maintain both IT and network environments, with end-to-end services provided through the entire ecosystem. Today, we help more than 180 CSP customers address a new generation of challenges. Based on this experience and insight, we offer the following perspectives on what CSPs need to accomplish now, and how they can proceed.

LEVERAGING ITSM FUNCTIONS AND EXPERTISE TO TRANSFORM SERVICE ASSURANCE

While IT and network operations have typically represented separate areas with different operational requirements, they do have similar CSP/Telco specific industry functionality including:

- **Trouble ticketing**—The reception, assessment, correlation, and resolution of detected problems within the network to improve the efficiency of trouble resolution and ensure reliable service delivery for customers.
- **Change management**—Mitigating and eliminating the risk of disruption to customer services during planned modifications to the network.
- **Service level management**—Managing the multiple service level agreements (SLAs) that can be linked to a single network disruption that affects multiple customers, helping the operator mitigate the penalties incurred for failing to deliver the contracted quality of service (QoS) included in the SLA.

By building on the common processes between IT and network operations, CSPs (Telcos) can benefit from the bespoke functional technologies supporting service assurance for network operations to enable them to deliver better results for their customers and their business.

SUPPORTING CLOUD MIGRATION AND CONVERGENCE

As many functions move to the cloud, including both service networks and internal IT, the boundary is increasingly blurring between these traditionally separate domains. Previously, the heads of IT and network lived in different worlds. Now, with the cloudification of everything and the rise of cloud-native technologies such as containers and microservices, these groups are talking to each other more and more.

To facilitate this process, CSPs should seek technology partners and trusted advisors with experience on both sides of the organization—IT and network operations. By gaining a holistic perspective on the evolving environment, and deploying a single platform across the two domains, CSPs can support greater convergence for better visibility, quality, and efficiency. This in turn makes it possible to find root causes faster, optimize utilization, and break silos to enable easier access, correlation, and analysis of complete data, and prevent faults in the network from impacting customers.

DRIVING AUTOMATION

In a rapidly transforming industry, CSPs must be able to respond faster to changing customer needs and emerging business opportunities. This calls for a shift to more proactive, predictive, and ultimately autonomous operations, including the creation, assessment, assignment, notification, and remediation of trouble tickets with minimal human involvement. In many respects, the automation mandate for CSPs mirrors the BMC vision of the [Autonomous Digital Enterprise](#), a digital-first business framework engineered to support transformation through actionable insights, business agility, and customer centricity.

ADVANCING ENVIRONMENTAL, SOCIAL, AND CORPORATE GOVERNANCE (ESG) OBJECTIVES

Being in the top 1% of companies rated by [EcoVadis](#) in the Software industry, BMC Software is passionate about delivering great technology and making the world a better place in the process. With its commitment to investing in ESG initiatives, BMC recognises that as ESG becomes a board-level priority, CSPs need to be able to leverage the full value of data to meet the standards now expected by customers, regulators and investors. Converged IT and network operations systems can play a key role in this effort by allowing CSPs to:

- **Extract data** from Internet of Things (IoT), social media, and customer engagement systems.
- **Employ AI and machine learning (ML)** to optimize, improve, guide, and execute actions.
- **Develop and track metrics** to measure progress toward ESG goals, prioritize improvement, and create detailed and accurate ESG reports.

DELIVERING A NEW GENERATION OF SOLUTIONS FOR CSPS

While CSPs have long relied on BMC technologies in their IT networks, the network operations domain includes important nuances in specific sub-processes beneath the superficial similarities of IT and network operations. In recent years, we have undertaken a journey to deliver products specifically built to support telecommunications networks and enable:

- **Intelligent service assurance** with the automation and scalability to resolve service disruptions quickly and proactively.
- **"Zero-touch" network operations management** to monitor, optimize, and comprehensively operate worldwide infrastructure from a single pane of glass and support fully automated, "closed-loop," and "headless" operations.
- **Service quality management** that combines operational SLA targets; comprehensive ticket enrichment, assignment, and notifications; detailed analysis; dashboards; and service analytics to provide valuable insights to all aspects of CSP services.
- **High-volume trouble ticket management** to address the large quantity of customer issues typical of CSP network operations.

BMC has developed a partner network with specific domain expertise which will help CSPs discover, design and deploy its broad range of technologies to enable CSP transformation.

At BMC, we're proud of the high standards of service excellence we've helped CSPs achieve across both IT and network operations over the past four decades. As the industry enters a new era, we're excited to continue to drive innovation and transformation to enable even greater levels of success for these businesses, and the best possible experiences for their customers.

[Enabling CSPs of Tomorrow, Today](#)