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Accelerating Digital Transformation with Automation

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Communication service providers (CSPs) must strengthen and streamline network inventory if they want to deliver great service and customer experiences.

In today's digital economy, your customer's journey is key to your success. But building customer trust is a long and painstaking process, and in today's competitive landscape, loyalty can be lost in an instant. To create the perfect ecosystem for your customers, you must automate your network so that you can fix problems as they happen while having the most accurate view of your network, your service and product offerings, and, most importantly, your customer needs.



We are at a point in time when expectations are high, and everyone wants everything to work together. More and more, it feels as if we should coin this era "the age of the easy button." But supporting the digital economy isn't easy.

We are in the thick of building complex networks to harness the limitless potential of every industry. After all, nearly every company across every industry is using some form of digital services in their day-to-day operations. Remote learning, remote work, gaming, and e-commerce have brought the demand for high-quality digital experiences to an unprecedented high. And it's not just businesses and consumers that rely on digital services to operate efficiently, but entire industries, too—from healthcare and manufacturing to banking and financial services, as well as in the public sector.

Underneath all those digital services lie your network and the intricate web of fiber connecting it—leaving no room for any service to be disrupted. A network disruption can be catastrophic, leaving customers, businesses, and industries at a standstill until it is fixed.

Business models need to be agile to compete in a zero-touch era, which means driving innovations while maintaining a level of service and experience that customers expect.

Redefining your networks—from connectivity to service

Devices were once considered simple endpoints in a network where connectivity and coverage were primary concerns. But the networks of today need to focus on providing customers with a seamless experience in a ubiquitous ecosystem. In the wake of next-generation networks everything is about speed, agility, and providing services to customers with unprecedented quality of experience.

Customer experience is one of the best ways that CSPs can differentiate themselves from the competition. And it pays off: 70 percent of all consumers see customer experience as a major factor when choosing the best telecom service provider—and consumers are willing to spend up to eight percent more for an excellent experience in the telecom industry.

CSPs must build, manage, and operate networks while delivering services with unparalleled customer satisfaction. To do just that, you need to be able to connect systems, data, and people while closing the loop and ensuring your services run smoothly. You need to know your network, as complex as it is, and automation is the key. You want customers to be independent through self-help and self-service while having a network that can self-sustain, self-optimize, and self-heal. This is only possible if you have the right partners. DISH is an example of how starting a complete 5G network from the ground up is not enough—proactive customer care is critical to delivering better network experiences.

There are also companies that are focusing on building solutions that manage end-to-end experiences. For example, Lumen Technologies recently launched an intuitive, all-digital experience for the purchase, configuration, and management of enterprise secure access service edge (SASE), which will simplify a company's digital transformation journey.

Drive innovation and growth with automation

With the accelerated pace of innovation and increasing network complexity, a CSP's ecosystem of network assets is more disaggregated and complex than it has ever been. It includes disparate systems, vendors, services, and siloed data that make managing the network and identifying opportunities for growth more complicated. Additionally, identifying, fixing, and integrating new services often requires multiple teams working on different platforms. All of this leads to hindered growth and innovation, missed goals, and wasted investments, making managing and automating network inventory so critical today.

To drive innovation and deliver better service, network inventory data must be connected to the rest of the value chain so CSPs can rapidly deploy services, maximize network investment, and redefine the customer experience.

This requires a shift in strategy and the simplification of an ever-complex environment. CSPs need to consolidate their inventory systems, automate their workflows, and implement measures that proactively monitor and maintain the health of their networks.

Having a single platform that can accurately locate resources and create workflows while at the same time executing and maintaining network operations is a baseline for achieving quality service and experiences. Using inventory management as the baseline (or foundation) for automation, CSPs can better identify and locate resources, connect inventory to resources and services, and connect functional teams to share information critical to completing tasks, fulfilling requests, and delivering new services. In doing so, CSPs can deliver services fast and address issues proactively with an accurate inventory.

Network inventory automation in action

Let's see this play out in action. Think about a company that orders a connectivity service that requires software to enable Voice over Internet Protocol (VOIP), new network equipment, and new desktop phones. Customer care manages the initial order, engineering identifies and builds the right equipment, and on-site field technicians complete the installations.

Seems simple, right? Even so, it still requires various teams to work together to fulfill the request. But often, these teams don't work on the same systems, so data, information, and communication are fragmented. For instance, customer care may not know what inventory is available, engineers may not have details on the customer's current product portfolio, and technicians may not know what equipment is needed for the installation.

An automated, connected approach to network inventory can be the solution. If all network inventory is connected and automated on a single platform, the process of receiving and completing a request—whatever that task may be—will be streamlined and simple.

Here's how: a customer service agent receives a request from a customer. Although they are on a separate team, from a single platform, they can assign the tasks to the network engineer to create the necessary work order.

That work order is then sent to the field service dispatcher who has the information needed to send the right field technician to the right place at the right time with the right assets to fulfill a request.

That technician can accept the tasks directly on their mobile device and will also see the work order, customer information, and pertinent details about that request—ensuring that they are equipped with the necessary parts for the task the first time. As they complete the tasks all parties—including the customer—are automatically notified.

Previously, this process would have involved additional manual steps. But with all the information and assets integrated into a single platform, teams can work seamlessly together quickly, while ensuring they have the right parts to do the job

Looking ahead in network automation

With networks powering digital economies today and serving as the backbone of most enterprises, CSPs are left with a massive opportunity to transform. Network inventory helps CSPs seize the opportunity by providing greater intelligence and visibility that enables them to quickly launch new services and deliver high-quality customer experiences.

But network inventory without process automation leads to wasted time and resources that CSPs can't afford to lose. Automation allows CSPs to connect their entire network ecosystem, leading to happier customers, more empowered employees, and business growth.