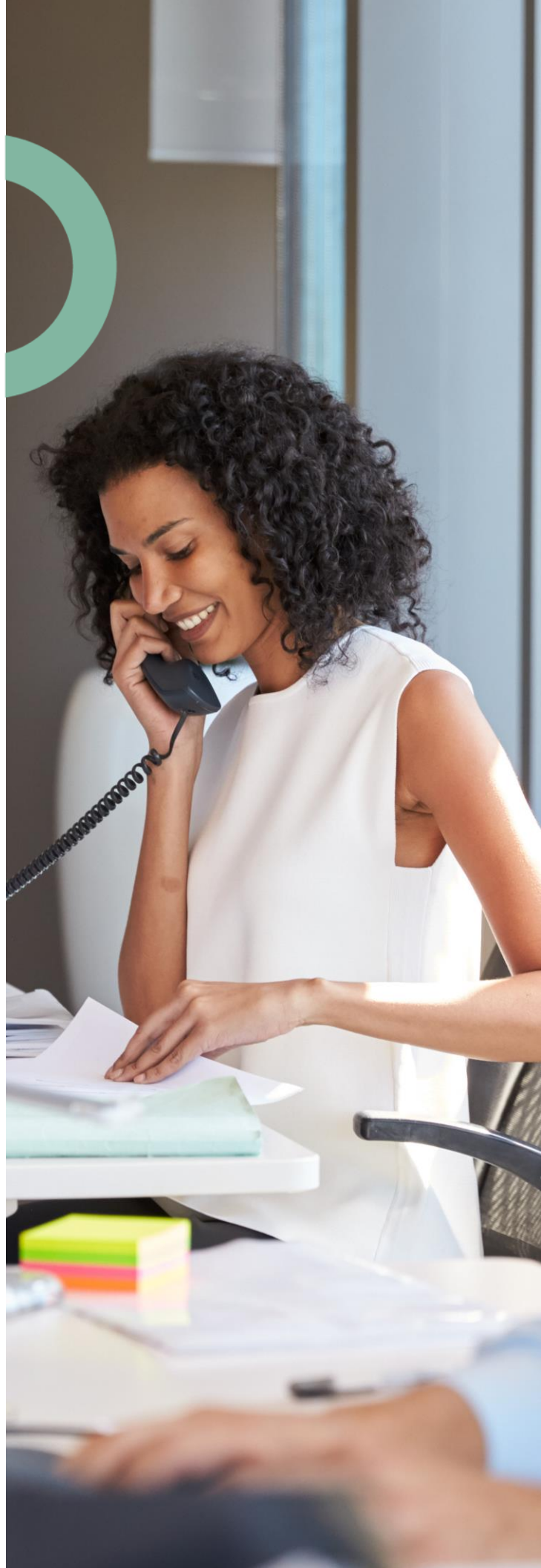


**servicenow**®



# Reimagining service assurance in telecom

Deliver superior service  
by connecting network  
and customer workflows



## Table of contents

03

### Executive summary

04

### It's time to make service assurance a differentiator

05

### A new end-to-end approach to service assurance

06 Proactive: Delight customers with transparency and self-service

07 Preventative: Stop and solve issues with real-time data

08 Empowered: Connect employees to share knowledge and simplify work

09 Scalable: Improve time-to-market and drive innovation

10

### Conclusion

11

### References



## Executive summary

As the telecom ecosystem expands, it has become increasingly complex to deliver high-quality, reliable service. But for an industry that increasingly relies on service assurance as one of its competitive differentiators, getting it right has never been more critical. Service sells and high-quality service assurance is paramount for customer experience, maintaining an efficient cost structure and customer retention.

According to a [Capgemini](#) report, communications service providers (CSPs) are at the forefront of a digital revolution, providing “anytime, anywhere, any device, any content” access to the connected world. This leadership brings about increasing pressure to support an ecosystem of applications that legacy BSS systems are ill-equipped to face.



**For CSPs, the heart of the service experience lies within the Network Operations Center (NOC) and customer care teams.**

But with silo-based IT structures, network and care teams often operate in isolation. While one section of the NOC may monitor the radio access network (for calls and texts), another may handle support for the internal network or its cloud infrastructure.

Few of these systems communicate with each other, making it almost impossible to manage the end-to-end experience. As outages and other problems occur, network teams manually filter and correlate a deluge of event data—much of which are noise and have no sustainable added value to solving the core issue at hand. As a result, CSPs struggle to swiftly solve problems at scale, and when they do get to the bottom of service issues, it takes longer to mobilize needed resources.

Fragmented systems also make it difficult to differentiate and deliver superior customer experiences. It’s hard to detect chronic problems or repeat issues that could potentially be avoided. Customers often are forced to react to an outage and may even find out on their own why it occurred. And with incident awareness siloed in the NOC, care agents are often blind to service issues and must swivel chair to get answers on time—frustrating both the agent and the customer.

The CSP ecosystem is already massive, and it’s only going to expand as networks transform, 5G growth accelerates, and more products and services enter the market. Without a unified approach that gives visibility into vendor and partner issues, CSPs have less control over service assurance outcomes, putting their operational resilience at risk.

Communications service providers that strategically place service assurance within their 5G network rollout strategy can enable positive experiences for their customers—consumers and business customers alike.

**Source: IDC, “[Service assurance is vital for a quality 5G customer experience](#)”**



# It's time to make service assurance a differentiator

In today's competitive landscape—with new assets entering the mix and with the increasing complexity of networks—achieving modern service assurance capabilities with end-to-end visibility is mission critical for CSPs. Customer expectations demand it, and organizational resilience depends on it.

CSPs must stop thinking horizontally—and worse yet, in silos. They need to develop systems with scale, speed, and performance to give customers the transparency they want. They need tools that help their network teams cut through the noise, quickly get to the most critical insights, and allow them to solve the troubles at hand. And they need a platform that allows them to proactively and accurately communicate to all stakeholders—employees, customers, vendors, and partners.

*How can CSPs reimagine service assurance?*

It starts by connecting network and customer workflows to orchestrate a proactive, transparent, and differentiated approach to service assurance.

**A unified service assurance platform helps CSPs:**



Break down organizational barriers that hamper efficiency and service



Achieve real-time clarity on the root causes of issues and take correct actions



Enrich decision processes (manual and/or automated) with superior insights



Prioritize fixes based on customer impact and business value



Create stellar customer experiences by keeping them informed and quickly resolving issues

Developing workflows to centralize and coordinate actions reduces the risk of human error, while ensuring everyone at every stage in the process can consistently and reliably move faster. That not only makes it easier for CSPs to improve quality of service (QoS), but it also improves customer satisfaction scores and reduces service level agreement (SLA) penalties.

Resiliency also means using automated data analysis to gain insight about network performance, to identify and correct problems often before the customer is made aware of them, and to address service requests with minimal to zero-touch intervention.

**Source: IDC, *"Digital network operations: Are you ready for what's coming?"***



# A new end-to-end approach to service assurance

With the digital transformation accelerating and customer expectations higher than ever, now is the time for CSPs to reimagine service assurance.

Whether overhauling their entire platform or building interconnected service assurance components into greenfield areas of the business, many are embracing digital transformation to become:

1

**Proactive:** Delight customers with transparency and self-service

2

**Preventative:** Stop and solve issues with real-time data

3

**Empowered:** Connect employees to share knowledge and simplify work

4

**Scalable:** Improve time-to-market and drive innovation

Digital natives and non-traditional players have made inroads with long-term CSP customers by appealing to their need for immediacy, flexibility, and affordability. CSPs are struggling to keep pace, both in terms of creating a customer experience that delivers “anytime, anywhere, any device, any content” access, and in enabling the back-end integration of technology systems, processes, and data stores that improve operational efficiency and lower the cost to serve.

*Source: Capgemini, “[Digital telco transformation – remaking core platforms to enable a digital future](#)”*



# 1. Proactive: Delight customers with transparency and self-service

The customer experience is a valuable asset, and expectations are higher than ever. Whether it's B2B or B2C engagement, today's customers measure a vendor's performance based on their own experiences and interactions with digital natives, like Amazon. As a result, CSPs often struggle to comparably deliver at this level of service experience.

Lack of transparency and visibility into service outages causes reactive inquiries and frustrated customers. And many CSPs outsource some or all customer care functions, creating yet another disconnect in the service assurance ecosystem. With price no longer a differentiator, the only sustainable way to stand out from competitors is superior customer experience.

Connected data and complete visibility are core to powering an end-to-end service experience that is a must-have for customers. When CSPs integrate the front, middle, and back operations together in one connected platform, they can create the ideal environment for effortless, real-time, and proactive customer care.

*How do CSPs create this connective tissue across operations?*

By leveraging a single CMDB for all customer, service, and network data, CSPs can empower customer care teams to quickly and efficiently handle every customer issue, and with higher accuracy levels. Data integrity, often a barrier for speed and quality, is maintained at higher levels—increasing the level of service all around. Network teams can even attempt to resolve issues without the customer being aware or notify them of issues quicker than ever before. And the customer is empowered and happier, too—with automatic, timely, and informative updates and reliable self-service tools that put information at their fingertips.



The relationship between customer-impacting events that occur in the network or IT operations is becoming clearer. There is more demand to link these traditionally distinct domains together, especially for B2B services. And with the rising emphasis on NPS measurement as a means of organizing and evaluating teams and people, the industrywide effort to close the loop between customers and the networks that serve them makes sense.

**Source: TM Forum, "[Customer experience: From digital to omnichannel](#)"**



## 2. Preventative: Stop and solve issues with real-time data

Correlating multiple events from a related incident is an immense task for an NOC, resulting in lost time, less productivity, and impaired customer satisfaction levels. Fragmented legacy technology has CSP networks drowning in disconnected, redundant data, with a single issue often creating redundant events. Add IoT and 5G into the mix, and complexity accelerates quickly.

Without proper correlation, network teams don't have the visibility to cut through this redundancy and myriad of data points and drive full resolution. And chronic issues are even harder to find and resolve.

When CSPs adopt holistic technology management and workflow automation based on a service-aware CMDB that links assets to customers, services, and products, they can leverage associations and linkages in data that elevate service assurance to a new level—speeding resolution with the right information, at the right time, all in one place.

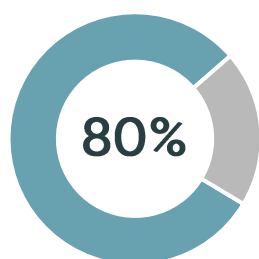
Real-time visibility across customer and network operations translates to a real-time picture of service health, and automatic mapping of customer impacts provides insight into outages.

NOC engineers can pull event data into one platform and apply modern capabilities, such as AI, to help prevent and even eliminate chronic issues. They also get added transparency into the full scope of resolution, enabling a more comprehensive understanding of outages and service degradation.

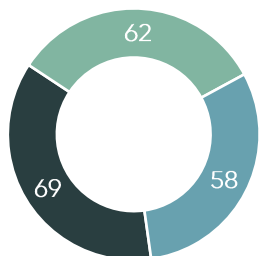
Emerging technologies, such as AI, analytics, and automation, are critical to serving customers' rising expectations while delivering greater levels of agility and operational efficiency.

Source: EY, "[Global communications study 2019-2020](#)"

### In the next wave of telecoms, are bold decisions your safest best?



of IT capex spending by telcos will shift to investments in digital infrastructure by 2024



IoT or 5G networks, automation, and AI are the key drivers for telcos' digital transformations over the next five years

- 5G and IoT
- Process automation
- AI

Source: EY, "[Global communications study 2019-2020](#)"

### 3. Empowered: Connect employees to share knowledge and simplify work

Having the right people, in the right jobs, with the right information, is key to elevating service assurance—but it's not an easy charge for CSPs.

The demand for hiring software engineers is increasing. In fact, the [U.S. Bureau of Labor Statistics](#) projects that employment for software developers is going to grow 22%, which is substantially faster than the 4% average for most careers. And CSPs must compete with digital natives and other employers perceived as more current and relevant.

Another part of the challenge is the large number of retirement-ready employees whose knowledge must be captured and shared. Additionally, today's employees don't want to navigate outdated systems and manual processes to get information—they want direct access to the knowledge they need, and they want it now.

Connected workflows can simplify how work gets done and help deliver the intuitive, consumer-like experiences employees want. With end-to-end visibility, NOC and care teams get improved line-of-sight into potential problems and are viewing the same real-time information. They also share a single view of customer data, enabling better collaboration across functions and simplifying service delivery.

Another bonus: digitizing, streamlining, and automating complex and repetitive processes allows employees to focus on the tasks that bring business value to the service assurance ecosystem. So, when CSPs elevate the employee experience, they elevate the customer experience too.



The day-to-day complexities agents navigate can be a hurdle for CSPs to achieve the world-class customer experience they want, especially with work-from-home as the prevailing model.

***Source: TM Forum, "Five telco contact center challenges that undermine customer experience"***



## 4. Scalable: Improve time-to-market and drive innovation

While 5G and IoT create opportunities for CSPs, growth hinges on their ability to quickly deliver new services in these dynamic environments through extensible technology.

But for many CSPs, scalability is challenging. Without a connected IT infrastructure in place, innovation stalls. Siloed systems and processes slow down time-to-market. Additionally, with staffing levels reduced, CSPs are relying on fewer engineers and agents to absorb the work—making it challenging to move quickly as they sift through multiple manual processes and systems.

With an agile cloud platform of connected workflows, CSPs can embrace a new generation of services and free up time for innovation.

Through automation and AI, they gain a single source of truth, with the information they need to move more efficiently and address technology shifts faster. As scalability improves, the internal teams that support new business models can deliver greater value to both consumers and businesses.



Customer experience is driving business in all industries. As network technology evolution continues, a key vulnerability of the communications industry is the lack of agile systems and flexible business processes to address changing customer needs.

**Source:** IDC, *"Enhancing the customer experience through data-driven assurance, AI, and automation"*



## Conclusion

Reimagining service assurance requires CSPs to think out-of-the-box and take bold steps to invest in solutions that have both their NOC teams, care agents, and customers in mind—and the time to start is now.

Even if broad implementation across the IT platform isn't possible, it's essential to act on some level. Some CSPs may opt to start by breaking down monolithic systems into micro-components or piloting service assurance solutions with a new product or service in greenfield areas.

As CSPs look for ways to strengthen service assurance, ServiceNow® can be a partner. **ServiceNow for Telecommunications connects the customer to the network on one platform.**



**Telecom Service Management** proactively detects, solves, and updates customers on issues, breaking down data silos between customer service and network operations.



**Telecom Network Performance Management** is the key to automating network and service issue resolution.

Trends in the industry, such as the emergence of chief technology and information officer (CTIO) roles, signal the importance of connecting the network and IT. While predictive operations and self-healing systems are on the horizon, CSPs first need to deal with more immediate challenges: connecting the functions that keep their networks running and the support centers that care for customers.

Making that connection is essential to thriving in the digital transformation, and to delivering next-level service assurance that creates a sustainable competitive advantage.

Behind every great experience is a great workflow. ServiceNow helps CSPs reimagine the telecom experience—turning digital transformation into a competitive advantage. To learn how ServiceNow can help CSPs to enhance service assurance by connecting the customer to the network on one platform, contact a member of the telecommunications team today.

LEARN MORE



## References

Capgemini, 2020 white paper: [Digital telco transformation – remaking core platforms to enable a digital future](#)

IDC, analyst report: [Service assurance is vital for a quality 5G customer experience](#)

IDC, July 2020 info snapshot: [Digital network operations: are you ready for what's coming?](#)

IDC, January 2020 analysis report: [Enhancing the customer experience through data-driven assurance, AI, and automation](#)

TM Forum, March 2020 analyst report: [Future customer experience: From digital to omnichannel](#)

Ernst & Young, 2019–2020 global telecommunications study: [Accelerating the intelligent enterprise](#)

TM Forum, September 2020: [Five telco contact center challenges that undermine the customer experience](#)