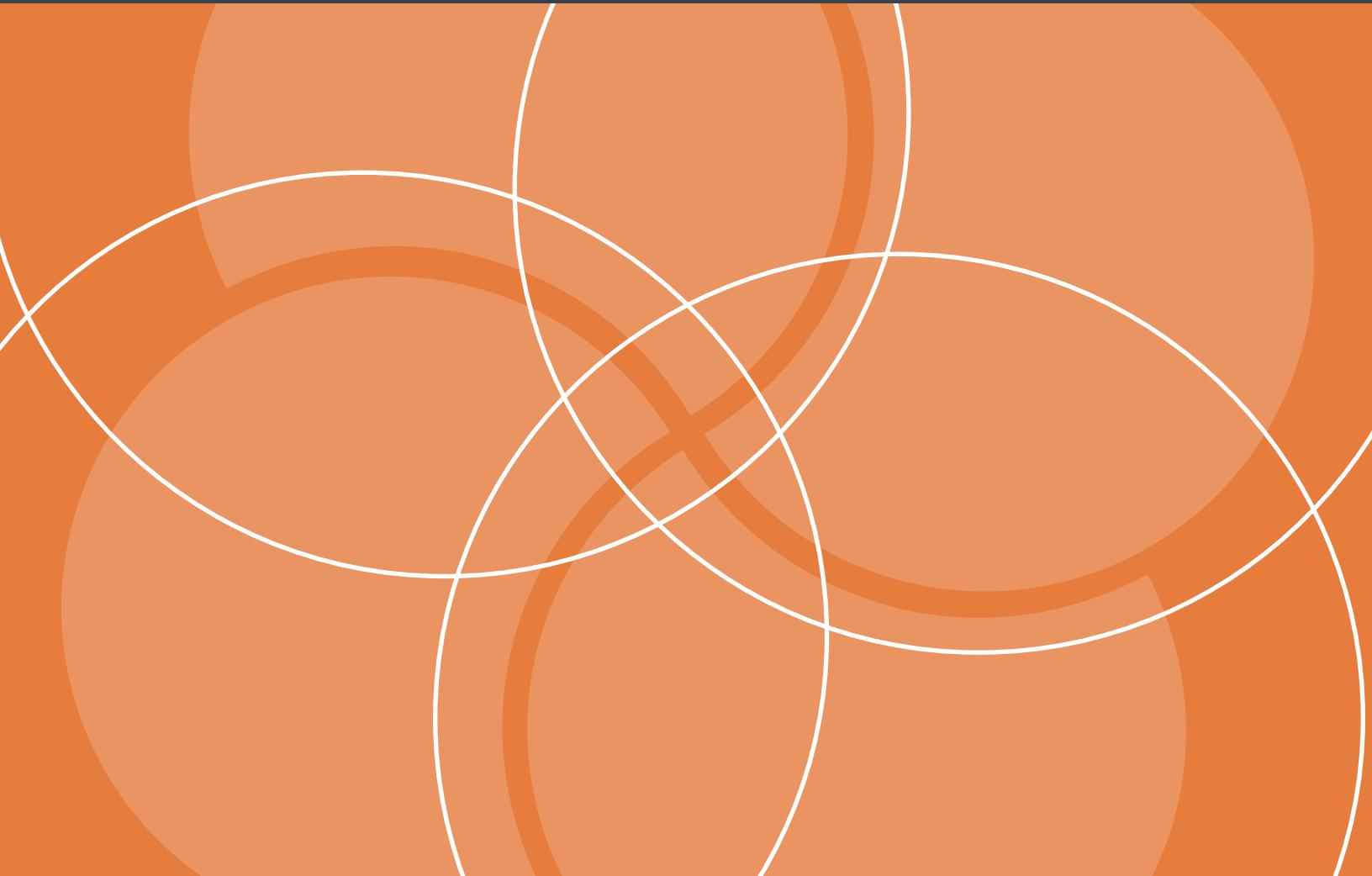


Industry Survey Findings

Top Trends Transforming Network Operations

The Era of Network Transformation and Performance Optimization



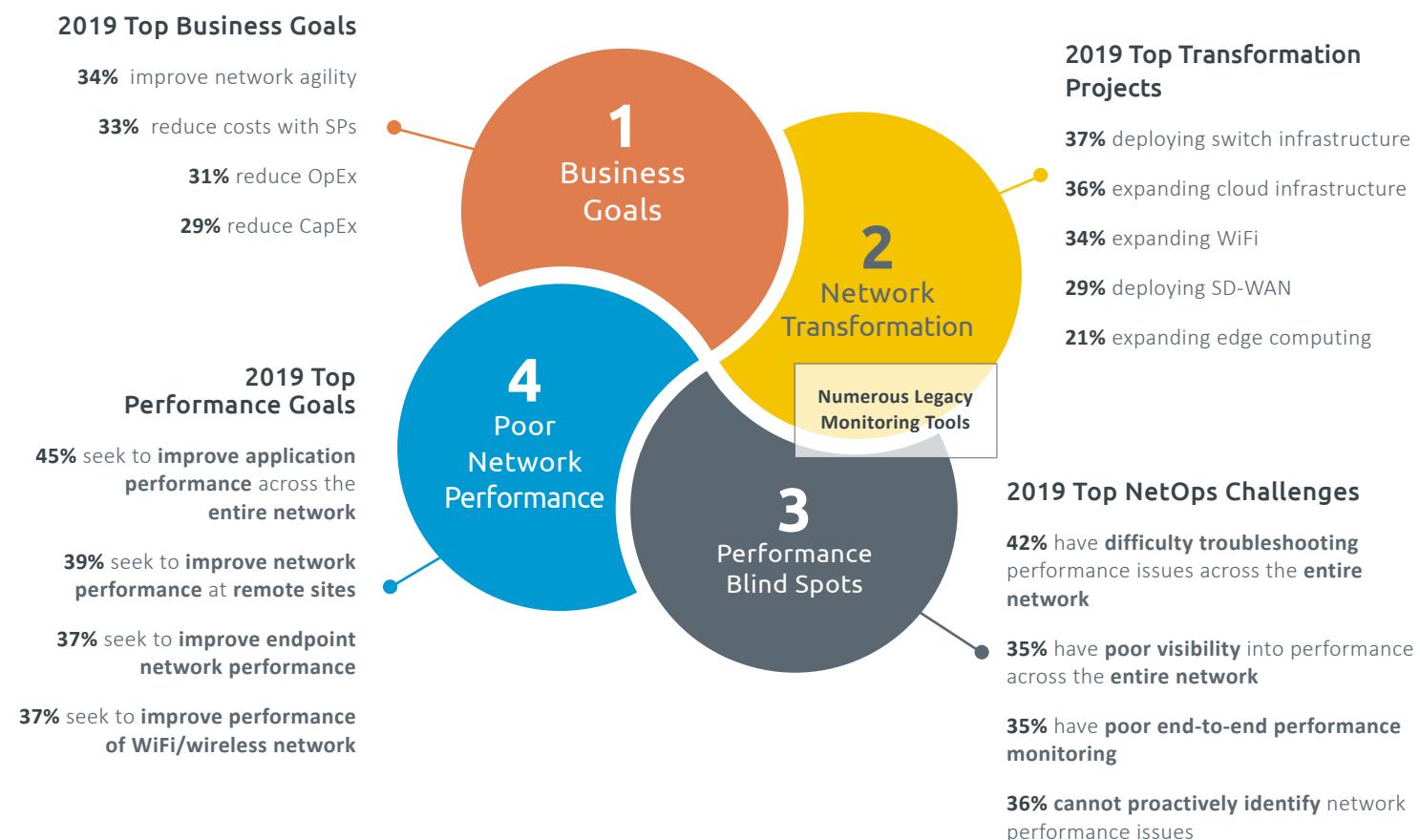
Research Insights

Successful Network Transformation Initiatives Driven by Need for Improved Network Performance and Agility

The strategic business objective of “doing more with less” is driving the transformation of enterprise networks. These transformations create new and unforeseen challenges for network management teams, especially when it comes to optimizing network performance. Teams that rely on legacy monitoring tools that only “see” a slice of the network are often crippled by a lack of holistic visibility across the entire network. Advanced network monitoring and management tools mitigate these visibility issues and help ensure successful network transformation implementations.

Network Transformation Cycle

Percent of survey responders noted as a “priority” or “high priority.”



Business Objectives Drive Network Transformations

As enterprises become more and more reliant on their networks for growth and operational efficiency, strategic IT decisions about the network are, in fact, strategic business decisions.

The goals of increasing network flexibility and agility, while at the same time reducing costs and doing more with less, have long been general enterprise objectives.

These objectives are now ensconced firmly in the Network/IT Operations units of large enterprises, as confirmed by NetOps professionals where 34% of survey participants noted improving network agility as their highest priority goals for 2019. Those same participants also ranked lowering service provider costs, Capex budget, and Opex budgets as their next most important goals for 2019.

1

2019 Top Business Goals Impacting Network Operations

Improve Network Agility

34%

of network professionals noted this as a priority or high priority

Goals 2019	1 - Not a Goal	2	3 Moderate Priority Goal	4	5 - High Priority Goal	4 or 5
Improve network agility	17.4%	16.1%	32.9%	22.6%	11.0%	33.6%
Reduce costs with service providers	20.0%	21.9%	25.2%	14.8%	18.1%	32.9%
Reduce Opex budget	21.3%	17.4%	30.3%	12.9%	18.1%	31.0%
Reduce Capex budget	23.9%	17.4%	29.7%	13.5%	15.5%	29.0%

Priority Network Transformation Projects Aimed to Achieve Both Agility and Cost Savings

The highest priority projects for 2019 are those that transform networks away from legacy architectures in order to become more agile and less costly.

Cloud-oriented projects allow organizations to offload infrastructure and maintenance costs to providers while at the same time enabling the ability to host, scale, and spin up applications and services when and where they are needed. At the same time, SD-WAN deployments allow organizations to reduce their overall WAN costs while speeding up provisioning and deployment for branch offices.

Network transformation projects align to corporate objectives



2019 Top Network Transformation Projects

Initiatives 2019	1 - Not a Priority	2	3 Somewhat a Priority	4	5 - High Priority	4 or 5
Deploying or expanding your switched infrastructure	22.60%	13.50%	27.10%	23.20%	13.50%	36.70%
Deploying or expanding multi-cloud network connectivity	23.90%	12.90%	27.70%	20.00%	15.50%	35.50%
Deploying or expanding public cloud infrastructure	25.80%	17.40%	22.60%	16.10%	18.10%	34.20%
Expanding WiFi/wireless network	25.20%	12.30%	28.40%	18.70%	15.50%	34.20%
Expanding or deploying mission-critical applications in the cloud	25.80%	19.40%	23.90%	15.50%	15.50%	31.00%
Deploying or expanding an SD-WAN solution	34.80%	14.80%	21.30%	14.80%	14.20%	29.00%
Deploying or expanding edge computing	32.30%	23.20%	23.20%	12.90%	8.40%	21.30%

Network transformation projects are not, however, executed in a vacuum. They occur in an environment of disparate legacy networks, some decades old, other only recently installed and stabilized. Each legacy network typically has its own tool-set for monitoring and management, some very capable, others highly limited. Many often exist as silos, with limited visibility and poor interoperability outside its own infrastructure. These siloed systems present more than a few challenges, oftentimes leaving network operations teams blind to new and old problems.

Network Performance Blind Spots Handicap Network Operations

42%

Network professions have difficulty troubleshooting across the entire network

Network operations professionals face numerous challenges when trying to deliver on strategic initiatives, the largest of which is simply a lack of time as cited by almost 43% of survey respondents in the 2019 Top Network Challenges Survey.

In fact, almost as many (42%) struggle with troubleshooting issues across the whole network as a result of disparate legacy architectures. Network professionals are challenged to find network performance issues that span several network domains (38%) and are hampered by poor performance visibility across multiple network fabrics (35%). These network performance blind spots contribute to the inability to improve overall network performance quality, which in turn hampers the successful delivery of network transformation initiatives.

Source: 2019 Top Network Performance Challenges Survey -
<https://www.liveaction.com/2019-top-network-performance-challenges/>

Network Performance Improvements Dominate 2019 Goals

Poor network performance negatively impacts business performance. NetOps pros clearly recognize this relationship and are focusing their efforts on this reality. Over 45% seek to improve application performance across the entire network; almost 40% seek to improve remote site network performance; and 37% respectively seek to improve endpoint and wifi/wireless performance.



45%

Highest Priority Goal: Improve application performance across the entire network

2019 Top Network Goals

Goals 2019	1 - Not a Goal	2	3 Moderate Priority Goal	4	5 - High Priority Goal	4 or 5
Improve application performance across the entire network	12.90%	11.60%	30.30%	24.50%	20.60%	45.10%
Improve proactive alerting and/or predictive insights of network incidents	14.80%	14.80%	28.40%	31.00%	11.00%	42.00%
Improve network monitoring across entire end-to-end network	14.80%	14.80%	28.40%	29.00%	12.90%	41.90%
Improve network performance at remote sites and/or branches	18.10%	10.30%	32.30%	27.70%	11.60%	39.30%
Improve end-point network performance	18.70%	16.10%	27.70%	22.60%	14.80%	37.40%
Improve performance of WiFi/wireless network	18.70%	16.80%	27.70%	24.50%	12.30%	36.80%
Improve reporting and insights from network data	18.70%	18.10%	26.50%	24.50%	12.30%	36.80%

End-to-End Network Performance and Network Visibility Lead Major 2019 Initiatives

Resolving network performance issues starts by gaining visibility and insight into what and where issues are occurring. The need to eliminate these network performance blind spots through end-to-end network visibility is one of the key network operations initiatives for 2019.

In fact, 39% of NetOps pros are addressing this need by consolidating legacy network monitoring tools while 37% seek better network performance management solutions and another 34% seek to automate or upgrade network configuration change management tools.

37%

Of enterprise network operations teams seek to upgrade their network performance management solution

4

2019 Top Network Performance Improvement Initiatives

Initiatives 2019	1 - Not a Priority	2	3 Somewhat a Priority	4	5 - High Priority	4 or 5
Consolidating network monitoring tools	24.50%	16.10%	20.00%	20.60%	18.70%	39.30%
Deploying or expanding network performance management solution	19.40%	16.10%	27.70%	23.90%	12.90%	36.80%
Automate or upgrade network configuration change management	23.90%	14.20%	28.40%	18.10%	15.50%	33.60%

LiveAction Optimizes Network Performance and Enables Network Transformation Initiatives

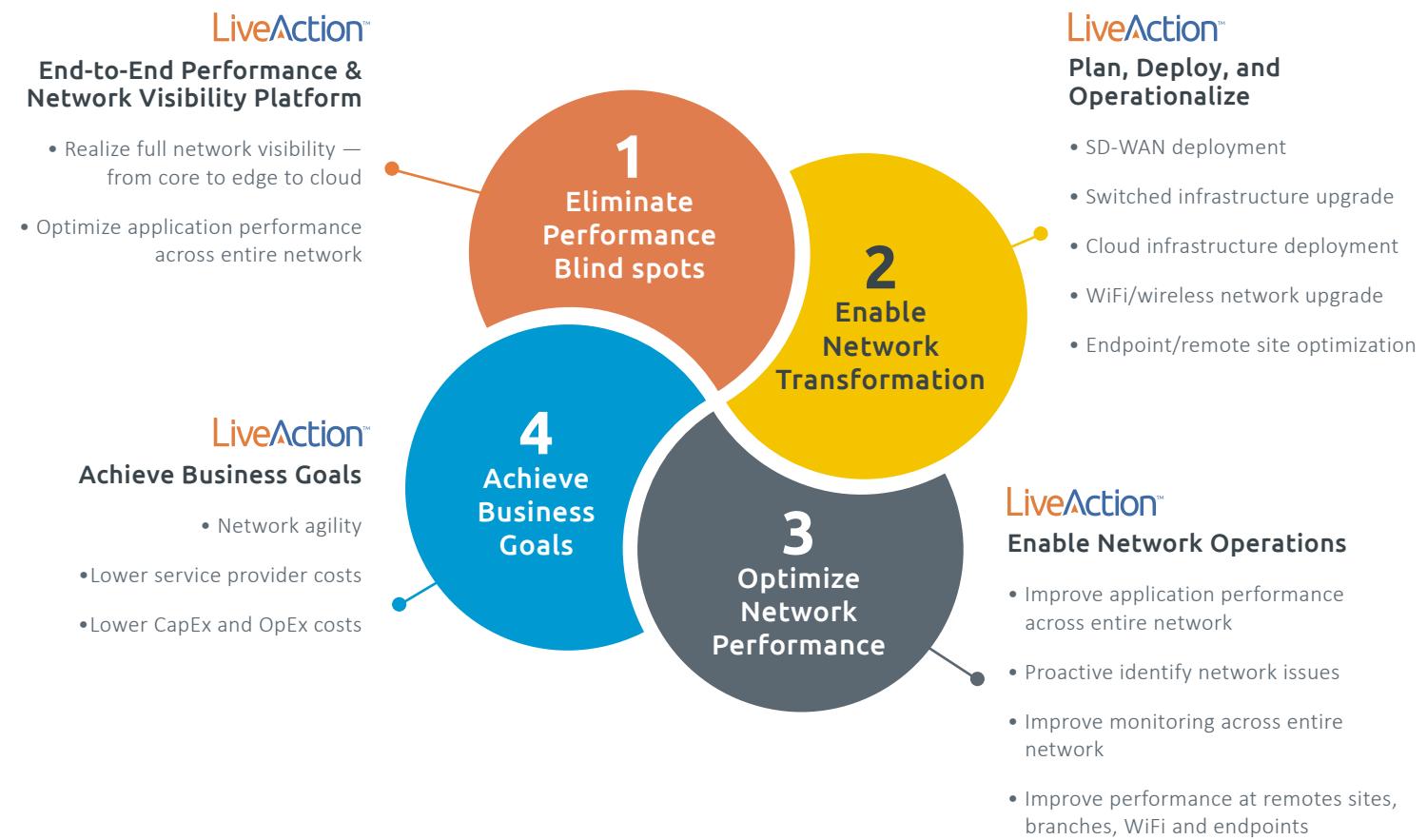
Network performance optimization and transformation depends on understanding what is happening to and in your network – all of your network.

LiveAction is a next generation network performance platform that eliminates network performance blind spots by providing visibility across the entire network.

This end-to-end visibility allows network professionals to plan, deploy and operationalize network transformation projects, such as infrastructure upgrades, SD-WAN deployments, WiFi expansions and endpoint optimizations.

The end result: Improved network performance and achieved business goals.

Network transformation depends on LiveAction.



1

LiveAction Provides End-to-End Performance and Network Visibility

Network performance blind spots caused by a hodge-podge of legacy network monitoring tools can be overcome by the use of modern network performance monitoring and management solutions similar to LiveAction, the industry's leader for enterprise companies. The importance of this need is supported by 39% of NetOps survey respondents who rank seeking to consolidate network monitoring tools as their highest priority. Upgrading network performance management solutions (37%) and automating or upgrading network configuration change management (34%) also supports the need for advanced network performance monitoring and management solutions like LiveAction.

2

LiveAction Enables Network Transformation

Leveraging LiveAction's advanced network performance monitoring and management platform makes network transformation projects easier and faster to plan, deploy and operationalize. Whether SD-WAN, advanced switches, multi-cloud, wireless or remote site optimization, on day 0, LiveAction easily identifies all devices on the network – the entire network – and the application traffic between them. On day 1, day 2 and beyond, LiveAction ensures the deployment was successful and provides capabilities to make on-going optimization easy.

4

LiveAction Helps Achieve Your Business Goals

LiveAction fosters network agility and cost reduction by providing network operations professionals with the breadth and depth of network visibility and performance management optimization tools, all in a single-pane-of-glass platform. With LiveAction, strategic network transformation projects become easier to plan, deploy and operationalize as blind spots are eliminated, and proactive network monitoring capabilities expedite the path to greater optimization and cost reduction.

3

LiveAction Optimizes Network Performance across Your Entire Network

No matter what your existing network infrastructure looks like nor where you're trying to migrate, LiveAction improves monitoring across the *entire* network, proactively identifies network issues, and improves performance from the core (SD-WAN, WAN) to remote sites and branches, and endpoints to the cloud. All of which work towards the goal of improving application performance across the entire network while reducing costs.

Research Background

In March of 2019, Sirkin Research was commissioned by LiveAction to identify the driving forces of network transformation and how the rapidly evolving network environment is impacting network professionals. It is well recognized that network transformations, such as SD-WAN, WiFi, and multi-cloud, edge computing among other trends, are creating a host of new challenges and opportunities for network operations. The purpose of this research is to better understand the key business goals driving network transformation and how these changes are impacting network operations in 2019. This research is based on responses from over 163 network and IT professionals in predominantly in large mid-market and enterprise organizations with at least \$1 billion in revenue.



About Sirkin Research:

Sirkin Research is focused on conducting primary research and delivering rich data insights to guide better decision-making for businesses. Located in Philadelphia, PA, USA, Sirkin research has over 15 years of experience working for some of the largest global technology and financial brands in the world. The firm's work spans the globe from Paris to London to New York. Sirkin Research has recently re-branded as Arras Consulting, <https://www.arrasconsulting.com/>.



About LiveAction:

LiveAction is the #1 enterprise network performance management platform, providing network professionals the situational insights needed to easily manage and control end-to-end performance of multi-domain, multi-vendor, and multi-cloud environments. LiveAction empowers network professionals to proactively identify, troubleshoot and resolve issues across vast hybrid environments, and to become more efficient by simplifying the management of cumbersome workflows. To learn more and see why LiveAction delivers the best network performance management and diagnostic (NPMD) solution for your organization, visit www.liveaction.com.