

FORRESTER®

The Total Economic Impact™ Of LiveAction LiveNX And LiveWire

Cost Savings And Business Benefits
Enabled By LiveNX And LiveWire

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Executive Summary

LiveAction delivers valuable network intelligence by analyzing a broad range of network telemetry across any type of landscape whether on-premises, data center, cloud, or edge. LiveAction's fully integrated network performance monitoring and high-speed packet capture solution allow network teams to quickly see, understand, and resolve network issues at scale before users are impacted. This results in reduced network downtime, avoidance of unnecessary bandwidth, increased employee productivity, and reduced business risk.

LiveAction enables an organization to monitor and troubleshoot its network and applications efficiently and easily from a single platform. The [LiveNX](#) network performance monitoring platform provides a central hub for monitoring network and application performance by automatically fusing telemetry from many different devices and sources, including flow, simple network management protocol (SNMP), software-defined wide area network (SD-WAN), cloud, and more, across multivendor, multidomain networks.

For parts of the network where flow data is not granular enough, [LiveWire](#) high-speed packet capture software deployed in strategic locations around the network analyzes packet data in real time and converts it to flow data for use in LiveNX. The combination of LiveNX and LiveWire provides enterprises with the tools to identify and troubleshoot performance issues across the entire network, whether it's on-premises, SD-WAN, cloud, or hybrid.

Avoided equipment and bandwidth costs

\$2.1 million



KEY STATISTICS



Return on investment (ROI)
153%



Net present value (NPV)
\$2.65M

LiveAction commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying LiveNX and LiveWire.¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of LiveNX and LiveWire on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives from companies with experience using LiveNX and LiveWire. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single [composite organization](#).

Prior to using LiveNX and LiveWire, these organizations relied on a patchwork of solutions to monitor and evaluate their networks. This resulted in

limited visibility of their overall networks and the onerous task of managing several disparate solutions at once. These limitations led to difficulty identifying and assessing network issues as well as cumbersome processes for flow monitoring and packet capture.

After the investment in LiveNX and LiveWire, the interviewees could seamlessly monitor and troubleshoot network and application performance, increasing gains in team productivity and decreasing costs. Key results from the investment in LiveAction grow out of the ease of use, increased visibility, advanced analytics, and automated reporting capabilities the combined solution of LiveNX and LiveWire provided.

LiveAction gave the interviewees capabilities they simply did not have before to assess and address network issues. LiveNX enhanced network flow data to deliver advanced visibility for all network devices. LiveWire analyzed packet-level data over time and sent this analysis to the LiveNX platform as actionable insights for network engineers.

Reduction in mean time to resolution
50%



KEY FINDINGS

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- **Avoided equipment (e.g., circuits) and bandwidth costs totaling \$2.1 million.** By properly identifying network issues, the composite organization reduces or eliminates the

purchase of expensive and avoidable equipment solutions that don't address underlying issues. The composite improves network performance by properly identifying chokepoints and redirecting network traffic instead of purchasing new equipment and additional bandwidth.

- **Increased business productivity from reduced network outages worth \$1.5 million.** LiveAction's visibility and analytical tools enable improved troubleshooting productivity enabled by the visibility and analytical tools, reducing network downtime.
- **Streamlined report generation by eliminating manual processes valued at \$576,000.** Time the composite organization's network engineers spends manually gathering data for report creation and generation is greatly reduced and, in many cases, eliminated. LiveAction provides a wealth of standardized, out-of-the-box reports and makes it easy to create customized reports.
- **Reduced mean time to resolution worth \$187,000.** The reduction in time to resolve even complex network issues with increased visibility from enhanced flow data and packet-level forensics results in an increase in the productivity of the composite's network support team. Time to resolve network issues is cut in half with LiveAction.

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified in this study include:

- **Monitoring different devices with a single solution.** Before moving to LiveAction's solution, the interviewees' organizations' ability to manage different devices from multiple device manufacturers at dispersed sites, including on-premises, remote, SD-WAN, cloud, and hybrid, was a challenge. This prior environment involved using multiple tools and software to develop a cohesive picture of network and application

performance. LiveAction offered the interviewees a single platform that scaled for multivendor, multidomain, and multicloud networks.

- **Enhanced visualization.** The ability to easily visualize network flow data to show hop-by-hop network traffic was a huge selling point for the interviewees. In addition, LiveWire analyzed packet data to provide enhanced visibility where flow data wasn't detailed enough. LiveWire sent this packet-to-flow data to LiveNX to show network and application performance data where none was previously available.
- **Ease of use.** The interviewees repeatedly mentioned the platform's ease of use. An hour or two of training was all that was needed to master key aspects of the solution.
- **Insights from "digital video recorder" (DVR) feature.** The interviewees noted that the ability to go "back in time" to properly diagnose past issues and make sure they do not occur again is invaluable.
- **Improved customer experience.** Every instance of network downtime translated to monetary loss when it affected the interviewees' customer-facing services and applications. LiveAction was a vital tool in minimizing that downtime.

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- **LiveNX device subscription.** A 36-month subscription for LiveNX averages \$600 per device. The cost to the composite organization with 500 devices is \$300,000.
- **LiveWire with maintenance, support, license, and software subscription.** The cost for five LiveWire physical or virtual appliances averages \$1.3 million over three years for the composite organization.
- **Implementation and training costs.** Time spent to implement the solution and train network staff

translates to \$94,000 in costs for the composite organization.

The representative interviews and subsequent financial analysis found that the composite organization experiences benefits of \$4.37 million over three years versus costs of \$1.72 million, adding up to a net present value (NPV) of \$2.65 million and an ROI of 153%.

“LiveAction has the widest range of functionality and the best methods of storage and visualization of any of the tools out there.”

Network engineer, banking



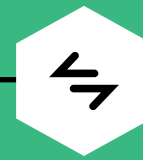
ROI
153%



BENEFITS PV
\$4.37M

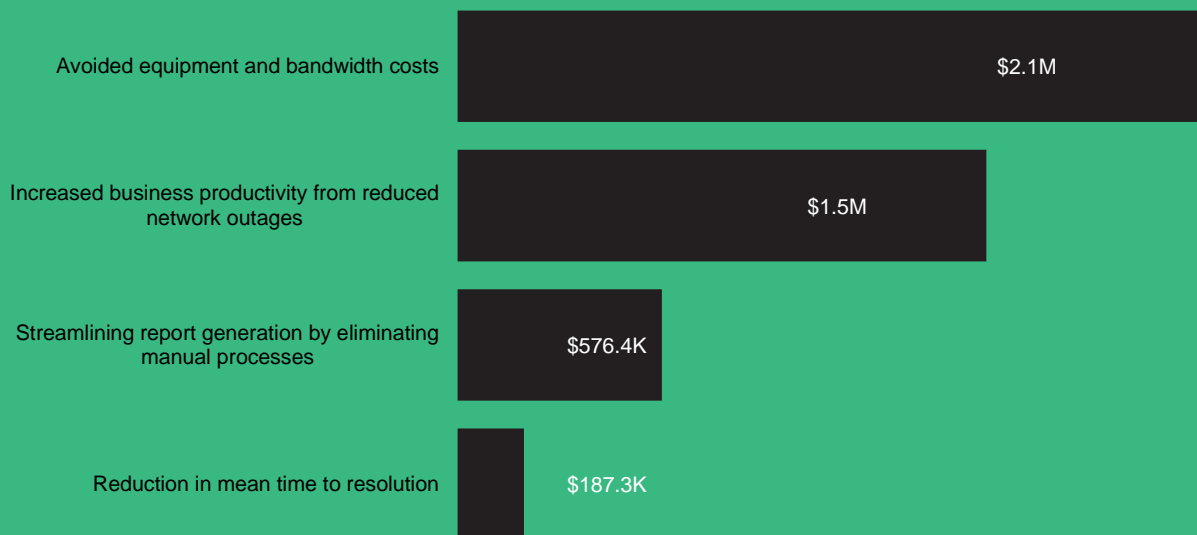


NPV
\$2.65M



PAYBACK
12 months

Benefits (Three-Year)



“It’s the best-of-breed product to do flow aggregation and reporting, and it continues to efficiently meet that need.”

— Technology team leader, financial services

TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact™ framework for those organizations considering an investment in LiveNX and LiveWire.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that LiveNX and LiveWire can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by LiveAction and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in LiveNX and LiveWire.

LiveAction reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

LiveAction provided the customer names for the interviews but did not participate in the interviews.



DUE DILIGENCE

Interviewed LiveAction stakeholders and Forrester analysts to gather data relative to LiveNX and LiveWire.



INTERVIEWS

Interviewed five representatives at organizations using LiveNX and LiveWire to obtain data with respect to costs, benefits, and risks.



COMPOSITE ORGANIZATION

Designed a composite organization based on characteristics of the interviewees' organizations.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interviews using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewees.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The LiveAction LiveNX And LiveWire Customer Journey

■ Drivers leading to the LiveNX and LiveWire investment

Interviews			
Role	Industry	Region	Sites Monitored
Technology team leader	Financial services	North America	1,100
Network engineer	Financial services	North America	1,000
Senior telecom analyst	Utility	North America	400
Network engineer	Utility	North America	5
Solutions architect	Manufacturer	Global, Headquarters in North America	500

KEY CHALLENGES

The interviewees noted how their organizations struggled with common challenges, including:

- **No centralized platform for efficiently managing all devices.** Prior to LiveAction, it was necessary to “log on to routers, switches, and network devices to dig through logs, looking for issues and resolving them on the fly,” according to a technology team leader in financial services. Organizations lacked a centralized platform to analyze network data and facilitate the remediation of issues.
- **Inability to monitor and analyze flow efficiently.** Legacy and alternative solutions were cumbersome to retrieve flow data. Generating reports to analyze performance was laborious. According to a senior telecom analyst with a utility firm, they had flow configured before, but the solution was “very kludgy and hard to use.”
- **Scalability.** Other solutions could not efficiently manage the interviewees’ organizations’ networks as they increased in size and scope. A solutions architect at a global manufacturer noted: “Previous tools that we had out there just could not handle the size and scaling that we

“Prior to using LiveAction there really wasn’t much there ... no centralized way of looking at the data and figuring out issues.”

Technology team leader, financial services

grew into today. You can’t have a site that maxes out capacity.”

SOLUTION REQUIREMENTS

The interviewees’ organizations searched for a solution that could:

- Visualize all network traffic and devices from a single screen.
- Unify flow and packet analysis in one place.

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the five interviewees, and it is used to present the

aggregate financial analysis in the next section. The composite organization has the following characteristics:

Description of composite. The composite organization is a multibillion-dollar enterprise that focuses on customer interaction and is heavily dependent on its network. The company has 40,000 employees and a network team comprised of 30 network engineers. It has historically managed its network using a mix of legacy applications, none of which were equipped to handle all aspects of a growing network environment. The organization is seeking a single solution to manage the entire network, monitor and assess flow, and provide packet capture capabilities.

Deployment characteristics. The organization has 500 sites with network devices to be managed in one central location with LiveNX. Five LiveWire appliances are deployed in data centers and other locations where packet capture is required for more in-depth analysis of performance. The full network

team is trained to operate LiveNX and utilize its reporting capabilities.

Key Assumptions

- **LiveNX deployed virtually on 500 devices**
- **5 LiveWire appliances**
- **30-person network team**
- **40,000 employees**

The ability to quickly assess application utilization on our network has been its biggest value. We've had a few incidents with fears of internal security issues that we've been able to either negate or confirm.

— Senior telecom analyst, utility

Analysis Of Benefits

■ Quantified benefit data as applied to the composite

Total Benefits						
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Avoided equipment and bandwidth costs	\$850,000	\$850,000	\$850,000	\$2,550,000	\$2,113,824
Btr	Increased business productivity from reduced network outages	\$600,000	\$600,000	\$600,000	\$1,800,000	\$1,492,111
Ctr	Streamlining report generation by eliminating manual processes	\$231,782	\$231,782	\$231,782	\$695,347	\$576,408
Dtr	Reduction in mean time to resolution	\$75,318	\$75,318	\$75,318	\$225,955	\$187,306
	Total benefits (risk-adjusted)	\$1,757,101	\$1,757,101	\$1,757,101	\$5,271,302	\$4,369,649

AVOIDED EQUIPMENT AND BANDWIDTH COSTS

Evidence and data. LiveNX and LiveWire allowed the interviewees’ organizations to avoid significant costs by correctly diagnosing underlying problems. For instance, when one interviewee thought their site might need to upgrade its circuits for more bandwidth, LiveNX determined that issue could be resolved by simply rerouting traffic. When asked about such cost savings, interviewees shared the following with Forrester:

- A solutions architect at a large global manufacturer told Forrester, “If somebody is complaining that they’re slow and they need more capacity, we can go into LiveNX and [see] what [they] are using right now.”
- A network engineer at a financial services firm shared that other solutions could identify high bandwidth usage at a site but not the cause. With LiveNX, “We are able to explain exactly what was causing the high bandwidth issue, which is key because not only do you solve the reason why at the site, but maybe you can solve the problem that was the cause and that would eventually cause issues in other areas.”

“[The organization was] looking to upgrade the circuit for \$80,000 to \$100,000 a year until we used LiveAction to determine that was not the problem.”

Solutions architect, manufacturer

Modeling and assumptions. The projected savings in avoided unnecessary upgrades from LiveNX and LiveWire for the composite organization is \$2,000 per year per site.

Risks. The ability of organizations to recognize these savings through the deployment of LiveNX and LiveWire can vary across organizations due to differences in:

- Bandwidth needs of diverse sites.
- The organization’s prior efficiency in managing bandwidth.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$2.1 million.

Avoided Equipment And Bandwidth Costs					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Average avoided costs per site	Composite	\$2,000	\$2,000	\$2,000
A2	Total sites	Composite	500	500	500
At	Avoided equipment and bandwidth costs	A1*A2	\$1,000,000	\$1,000,000	\$1,000,000
	Risk adjustment	↓15%			
Atr	Avoided equipment and bandwidth costs (risk-adjusted)		\$850,000	\$850,000	\$850,000
Three-year total: \$2,550,000			Three-year present value: \$2,113,824		

INCREASED BUSINESS PRODUCTIVITY FROM REDUCED NETWORK OUTAGES

Evidence and data. Any disruption of the interviewees’ networks could lead to lost productivity. Disruptions affected an entire site or prevent remote employees from logging into the network through a VPN connection. By drastically reducing the duration of these disruptions, employees got back to work faster.

- A network engineer at a utility firm told Forrester they saw “about a 50% reduction in downtime length with adding LiveAction.”
- A senior telecom analyst at another utility firm noted, “Downtime has been greatly reduced with the visibility that LiveNX provides through NetFlow.”
- A solutions architect at a global manufacturer noted that every minute of network downtime at one of their facilities can cost the firm significant sums of money and that LiveNX was a vital tool in ensuring it kept its production infrastructure intact.

Modeling and assumptions. Forrester assumes that the composite organization avoids on average \$1,500 in productivity losses per site per year after deploying LiveAction.

Risks. The ability to recognize these productivity gains through the deployment of LiveNX and LiveWire can vary across organizations due to differences in:

- Dependence on network connectivity for productivity.
- Proportion of employees working remotely and connecting to the network through a VPN.
- Salary level of employees affected.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of \$1.5 million.

Increased Business Productivity From Reduced Network Outages					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Avoided productivity loss per site from network downtime prior to LiveAction	Composite	\$1,500	\$1,500	\$1,500
B2	Total sites	Composite	500	500	500
Bt	Increased business productivity from reduced network outages	B1*B2	\$750,000	\$750,000	\$750,000
	Risk adjustment	↓20%			
Btr	Increased business productivity from reduced network outages (risk-adjusted)		\$600,000	\$600,000	\$600,000
Three-year total: \$1,800,000			Three-year present value: \$1,492,111		

STREAMLINING REPORT GENERATION BY ELIMINATING MANUAL PROCESSES

Evidence and data. LiveNX eliminated the need for labor-intensive data gathering and offered a wide range of standardized out-of-the-box reports and easy customizable report creation to streamline reporting.

- The network engineer in financial services reported saving a minimum of 2 hours for every report run. Once set up, reports are automatically run and distributed on a schedule. The interviewee noted, “You can also take those reports and turn them into a dashboard.”
- According to a senior telecom analyst at a utility firm, their organization generated weekly reports that they did not have before: “Every Friday morning, they got a tiny PDF in their inbox that gives them exactly what they want. So, I would say reporting would be the core automation that LiveNX provides us.”
- A network engineer at another utility firm told Forrester that prior to LiveAction, their team members spent 20% of their time each week dedicated to data collection and report generation. Since deploying LiveAction, these efforts have been all but eliminated.

- A team leader at a financial services firm noted that LiveAction’s automatic, centralized data collection and reporting capabilities eliminated the cost of manual data collection and report maintenance.

“LiveAction is really good at taking trillions and trillions of flow records and being able to turn it into something useful in a visual means.”
Network engineer, finance

Modeling and assumptions. Forrester assumes the following in valuing this benefit:

- The time spent on manual data collection and report creation efforts is reduced by 2.5 FTEs with LiveAction.
- The average fully burdened salary of a network engineer is \$121,193 per year.
- Ninety percent of the time saved is used for other value-added tasks.

Risks. The ability to recognize these through the deployment of LiveAction can vary across organizations due to differences in internal and external reporting requirements for the organization.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of \$576,000.

Streamlining Report Generation By Eliminating Manual Processes					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Reduction of FTE effort on manual processes for generating reports	Composite	2.5	2.5	2.5
C2	Fully burdened annual salary	TEI standard	\$121,193	\$121,193	\$121,193
C3	Productivity recapture	TEI standard	90%	90%	90%
Ct	Streamlining report generation by eliminating manual processes	C1*C2*C3	\$272,685	\$272,685	\$272,685
	Risk adjustment	↓15%			
Ctr	Streamlining report generation by eliminating manual processes (risk-adjusted)		\$231,782	\$231,782	\$231,782
Three-year total: \$695,347			Three-year present value: \$576,408		

REDUCTION IN MEAN TIME TO RESOLUTION

Evidence and data. The aforementioned reduction of mean time to resolution that is achieved with LiveAction generated a productivity gain for network administrators. Reported network incidents were addressed and resolved by support staff. Interviewees estimated that LiveNX cut the mean time to resolution in half.

- In addition to the network visibility that allows faster identification of issues, time to ticket creation has been greatly reduced by “hours, if not days because the prior process was very manual,” according to one network engineer at a financial services firm. The engineer continued to note that with “an alert configured in LiveAction, it’s almost instantaneous that it will go to the integrated control console [ICC].”
- One network engineer with a utility firm told Forrester that LiveAction “cut the time to resolve an issue by half at least, and that’s probably being conservative cost-wise.”

- A network engineer at financial services firm noted LiveAction allowed them to resolve issue in “at least half the time.”

Modeling and assumptions. Forrester assumes the following in valuing this benefit:

- Fifty incidents are reported each week within the composite organization.
- One network administrator is assigned per incident.
- The average fully burdened salary of a network support team member is \$43 per hour.
- One hour is saved per incident with the LiveAction solution.
- Seventy-five percent of the time saved is used toward other value-added tasks.

Risks. The ability of organizations to recognize these productivity gains through the deployment of LiveAction LiveNX and LiveWire can vary across

organizations due to differences in network requirements and usage.

Results. To account for the risk level, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \$187,000.

Reduction In Mean Time To Resolution					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Incidents per week	Composite	50	50	50
D2	Network administrators assigned	Interviews	1	1	1
D3	Fully burdened hourly salary	TEI Standard	\$43	\$43	\$43
D4	Hours saved per incident	Interviews	1	1	1
D5	Productivity recapture	TEI Standard	75%	75%	75%
Dt	Reduction in mean time to resolution	$D1 \cdot D2 \cdot D3 \cdot D4 \cdot D5 \cdot 52$	\$83,687	\$83,687	\$83,687
	Risk adjustment	↓10%			
Dtr	Reduction in mean time to resolution (risk-adjusted)		\$75,318	\$75,318	\$75,318
Three-year total: \$225,955			Three-year present value: \$187,306		

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **Monitor different devices with a single solution.** One of the primary benefits that drove the interviewees’ organizations to LiveAction was the ability to monitor and troubleshoot the entire network under one platform. One network engineer noted, “Being able to manage a large number of devices at disparate sites is LiveAction’s strength.” Interviewees also noted that having both flow and packet data capture within the same product line was valuable to network teams.
- **Enhanced visualization.** The ability to visualize hop-by-hop network data was an important factor in the interviewees’ purchase decisions.

According to one senior telecom analyst at a utility firm, “[LiveAction provided an] amazing amount of visibility on every aspect of a WAN circuit ... we went from nothing to just a very detailed view.” A network analyst at another utility firm told Forrester: “[It is] all available there from one screen and the ability to kind of move back and forth between them. That’s definitely an enhancement that we’ve seen.”

- **Ease of use.** The platform’s ease of use repeatedly came up in the interviews. According to a senior network analyst at a utility firm, they had “two hours sliced away for training but on average used only an hour. That is all that is needed to master key aspects of the solution.” A network engineer at a banking firm said: “It’s ease of use and visibility. It’s a well-designed tool.”

- **Insights from DVR feature.** The senior telecom analyst described this feature of the LiveAction suite, noting: “The network DVR of collecting net flow statistics [shows] exactly what was happening at the time [of an incident]. ... In a lot of cases, we were able to remediate issues so they wouldn’t happen again.” This DVR feature enabled network administrators to use both flow and packet data to triage past events to troubleshoot and remediate intermittent issues while ensuring they don’t happen again. Before deploying LiveAction, there was little the support team could do if they did not receive a call until after the incident.
- **Improved customer experience.** LiveAction was a vital tool in minimizing downtime for interviewees. When asked about LiveAction’s effect on business operations, a network engineer in banking sector responded: “Every time that you have downtime ... it’s generally some kind of monetary loss. ... If you have issues all the time with something customer facing, you’re going to lose customers.”

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer

might implement LiveNX and LiveWire and later realize additional uses and business opportunities, including:

- **Flexibility and scalability.** Interviewees expressed that it is important that the solution can handle the network as it grows. A network engineer offers, “We’re thinking about putting some LiveWires [in some locations we identified] just to monitor their traffic and send us flow back. We’re growing our footprint and trying to go with the flow first, and because of the flexibility or visibility of the LiveAction tools, that’s the tool we’re using to progress along that path.”
- **Support for emerging technologies.** Interviewees spoke of migrating to a cloud environment. LiveAction’s cloud support was a consideration in adopting the solution. According to a senior telecom analyst at a utility firm, “I see the future of LiveNX as really helping us in those cloud-type environments.” They added, “It’s going to shine in monitoring these heavily metered cloud circuits.”

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in [Appendix A](#)).

“LiveNX has excellent built-in visualizations like flow path analysis and LAN utilization over time.”

— Network engineer, financial services

Analysis Of Costs

■ Quantified cost data as applied to the composite

Total Costs							
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value
Etr	LiveNX device subscription for 36 months	\$300,000	\$0	\$0	\$0	\$300,000	\$300,000
Ftr	LiveWire appliance and support, license, and software subscription for 36 months	\$1,330,000	\$0	\$0	\$0	\$1,330,000	\$1,330,000
Gtr	Implementation and training costs	\$94,159	\$0	\$0	\$0	\$94,159	\$94,159
	Total costs (risk-adjusted)	\$1,724,159	\$0	\$0	\$0	\$1,724,159	\$1,724,159

LIVENX DEVICE SUBSCRIPTION FOR 36 MONTHS

Evidence and data. LiveAction offered pricing based on the number of devices LiveNX supported, which allowed the interviewees' organizations to easily scale up and down with the number of sites and devices in their network.

Modeling and assumptions. LiveAction provided an estimate of the solution cost based on the composite organization's deployment, which assumes that LiveNX is deployed virtually and supports 500

network devices at an average cost of \$600 per device for a 36-month subscription.

Risks. The cost of LiveNX can vary across organizations due to differences in the configuration and potential discounts based on vendor and volume.

Results. Forrester added no risk adjustment, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$300,000.

LiveNX Device Subscription For 36 Months						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
E1	Subscription fee per device	LiveAction	\$600			
E2	Total subscriptions	Composite	500			
Et	LiveNX device subscription for 36 months	E1*E2	\$300,000	\$0	\$0	\$0
	Risk adjustment	0%				
Etr	LiveNX device subscription for 36 months (risk-adjusted)		\$300,000	\$0	\$0	\$0
Three-year total: \$300,000			Three-year present value: \$300,000			

LIVEWIRE APPLIANCE AND SUPPORT, LICENSE, AND SOFTWARE SUBSCRIPTION FOR 36 MONTHS

Evidence and data. LiveAction offered standard pricing based on the number of LiveWire appliances the interviewees’ organizations purchased and supported.

Modeling and assumptions. LiveAction provided an estimate of the solution cost based on the composite organization’s deployment, which assumes that five LiveWire appliances are deployed. The average cost of each physical or virtual device is \$87,000 with an additional \$179,000 in license, software subscription, and maintenance fees that cover three years.

Risks. The cost of LiveNX can vary across organizations due to differences in the configuration and potential discounts based on vendor and volume.

“LiveWire provides a deeper visibility but it still very easy to get to because the LiveWire sends the data directly into the LiveNX platform.”

Network engineer, finance

Results. Forrester added no risk adjustment, yielding a three-year, risk-adjusted total PV of \$1.3 million.

LiveWire Appliance And Support, License, And Software Subscription For 36 Months						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Hardware costs	LiveAction	\$87,000	\$0	0	0
F2	License and subscription fees	LiveAction	\$179,000	\$0	0	0
F3	LiveWire appliances	Composite	5	0	0	0
Ft	LiveWire appliance and support, license, and software subscription for 36 months	(F1+F2)*F3	\$1,330,000	\$0	\$0	\$0
	Risk adjustment	0%				
Ftr	LiveWire appliance and support, license, and software subscription for 36 months (risk-adjusted)		\$1,330,000	\$0	\$0	\$0
Three-year total: \$1,330,000			Three-year present value: \$1,330,000			

IMPLEMENTATION AND TRAINING COSTS

Evidence and data. According to interviewees, initial deployment took no more than six to eight weeks, while documentation and optimization of the solution took the remainder of a senior network engineer’s time and effort in the six to 12 months of deployment.

Interviewees also noted that no more than 2 hours of internal training was necessary for the networking team to master key aspects of the platform.

Modeling and assumptions. Forrester assumes the following in valuing this cost:

- Initial implementation and further optimization and documentation required 1.25 FTEs of effort from senior network engineers over 26 weeks.
- The average fully burdened salary of a senior network engineer is \$67 per hour.

- The network support team is comprised of over 30 personnel.
- Training required to learn the LiveAction platform is 2 hours long.
- The average fully burdened salary of a network support team member is \$43 per hour.

Risks. The cost of implementation and training can vary across organizations due to differences in the experience and skill set of network engineers as well as the complexity of the network environment.

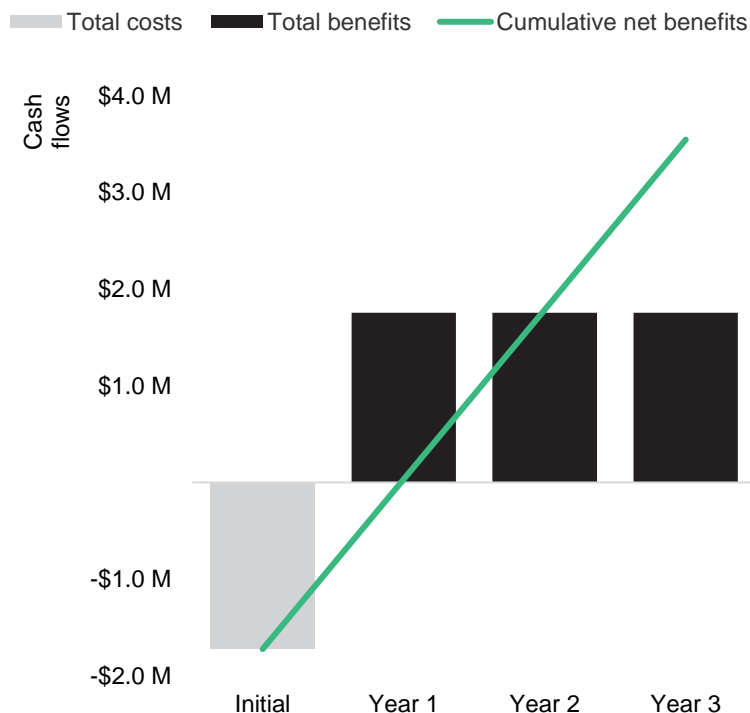
Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of \$94,000.

Implementation And Training Costs						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	FTE effort from senior network engineers deploying, optimizing and documenting solution	Interviews	1.25	0.00	0.00	0.00
G2	Weeks to complete implementation at all sites, optimization and documentation	TEI standard	26	0	0	0
G3	Hours in work week	TEI standard	40	40	40	40
G4	Fully burdened hourly rate for senior network engineer	TEI standard	\$67	\$67	\$67	\$67
G5	Network staff - engineers and administrators	Composite	30	0	0	0
G6	Fully burdened weighted-average hourly rate for networking staff	TEI standard	\$43	\$43	\$43	\$43
G7	Training hours	Interviews	2	0	0	0
Gt	Implementation and training costs	$(G1 \cdot G2 \cdot G3 \cdot G4) + (G5 \cdot G6 \cdot G7)$	\$89,675	\$0	\$0	\$0
	Risk adjustment	↑5%				
Gtr	Implementation and training costs (risk-adjusted)		\$94,159	\$0	\$0	\$0
Three-year total: \$94,159			Three-year present value: \$94,159			

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$1,724,159)	\$0	\$0	\$0	(\$1,724,159)	(\$1,724,159)
Total benefits	\$0	\$1,757,101	\$1,757,101	\$1,757,101	\$5,271,302	\$4,369,649
Net benefits	(\$1,724,159)	\$1,757,101	\$1,757,101	\$1,757,101	\$3,547,143	\$2,645,490
ROI						153%
Payback period						12 months

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.



PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendix B: Endnotes

¹ Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

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