The Financial Impacts of AIOps With Centerity

Cost Avoidance and Financial Benefits
Enabled by AIOps

October 2021

Total Cost of Ownership and Financial Impacts Business Case

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ABOUT CENTERITY SYSTEMS

Centerity (www.centerity.com) is a leading provider of an all-in-one enterprise-class IT and business service monitoring platform. While changing the rules of monitoring, Centerity AIOps enables IT organizations in various market segments to simplify all aspects of network management, Information flow, and enhanced business service performance.

Centerity AIOps is a unified platform that simplifies the *Distributed Enterprise Edge* complexity with software intelligence. A purpose-built Hybrid platform that provides real-time converged observability of IT / OT Services, Security and Operational data in both Technology & Business context, translating IT telemetry data into actionable business insights.

Executive Summary

AIOps from Centerity is a purpose-built unified Hybrid platform that provides real-time converged observability of IT / OT Services, Security and Operational data in both Technology & Business context. Centerity's AIOps intelligent platform is an IT infrastructure and operations management solution that simplifies edge complexity with software intelligence powered by machine learning (ML) algorithms and advanced analytics to enable automation of manual processes and autonomous remediation. Customer organizations eliminated between 44% to 67% of work, freeing up IT professionals to pursue higher value activities. The scope of work for IT operations management at one organization increased by a factor of four without adding resources.

Centerity conducted a Total Cost of Ownership (TCO) and Financial Impact study to examine the potential return on investment (ROI) enterprises may realize by deploying **Centerity's AIOps Intelligent Platform.** The purpose of this study is to provide Enterprises with a framework to evaluate the potential financial impact of Automation leveraging advanced analytics for IT operations on their organizations. AIOps combines disparate data from across all primary IT operations functions with analytics and ML to improve availability and performance monitoring, event correlation and analysis, IT service management, and automation.

To better understand the benefits, costs, and risks associated with this investment, Centerity conducted multiple customer studies averaging 2.5 incidents with an MTTR of <15 minutes per month. Based on this study and using Centerity's AIOps platform, Centerity used this experience to project a three-year financial analysis for the target customer.

Prior to using AIOps, the customer's organization deployed multiple infrastructure and operations management tools to address the growing *"Distributed Enterprise Edge"* complexity of their large footprint, legacy, and emerging IT technology footprint. However, this patchwork of homegrown and point solutions could not keep pace with the increasing complexity of their IT landscapes, leaving these organizations with gaps in their end- to-end visibility and siloed monitoring of infrastructure, applications, and networks. These limitations led to decreased transparency across the IT stack, making it difficult to identify and remediate the root cause.

KEY STATISTICS

Return on investment (ROI)
73.4%

Total Benefits (Risk Adjusted)
$3.5M

Leveraging Centerity's AIOps Intelligent Platform, the customer organizations realized significantly enhanced infrastructure and *Enterprise Edge* performance and visibility. This new insight when combined with the improved analytics and automation available in AIOps from Centerity helped customer organizations to identify and eliminate 56% of its manual processes, knocking out 80,812 tickets that would otherwise be manually handled and resolved in the First Call (FCR), <15 minutes. Key results included an improvement in the effectiveness of IT infrastructure and operations professionals, the automation of manual processes, a reduction in the costs for monitoring tools due to consolidation, additional productivity from improved uptime, an acceleration and greater confidence in performance measurements across the IT stack.

Total Three-Year Benefits

$10.8 million

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- **Increased the effectiveness of IT professionals, valued at $258,760 annually.** AIOps from Centerity enabled better collaboration, proactive monitoring, and integrations across the IT operations management (ITOM) toolchain. As a result, the scope of work being completed by the ITOM team increased by a factor of three, yet the headcount of the team remained unchanged.

- **Increased automation of manual processes worth $671,757.** AIOps contextualizes and correlates all the data coming into the platform using ML algorithms. With infrastructure, applications, and network teams all visualizing the same performance, ITOM could provide a higher level of automation. Within the first year of implementation, Customer organizations automated 44% to 56% of targeted manual processes.

- **Reduced costs for monitoring tools valued at $562,500.** Having a single platform that spans infrastructure, applications, networks, and storage enables enterprises to consolidate monitoring software, eliminating some of the burden associated with maintenance (software setup, plug-ins, add-ons, etc.). By avoiding multiple monitoring tools, the organization avoided the costs associated with training IT administrators for each tool.

- **Loss of productivity avoidance of employees handling, filing, and submitting help desk tickets valued at $2,677,971.** The customer eliminated some of the burden associated with service desk hold times, abandoned calls, time spent submitting chatbot and self-services service tickets due to issues related to technology downtime and outages. That translated into over 2.5 hours of lost productivity per week. Per employee.

An analysis has calculated that average mid-large corporations experiences 87 hours of network downtime a year. Incidents range anywhere form a few minutes to several hours with an average cost of $5,600 per minute, with cost is increasing
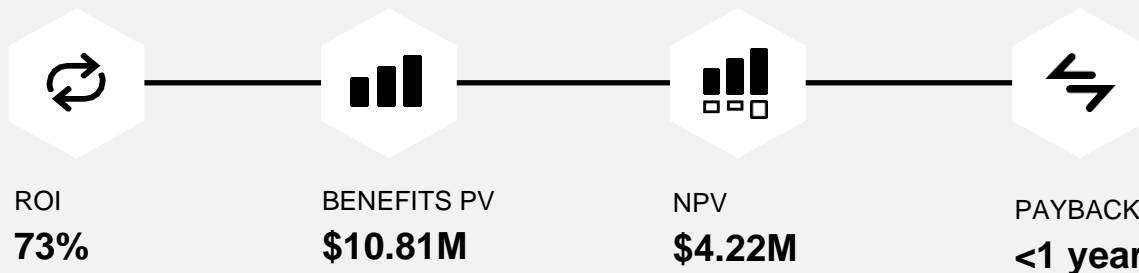
— Gartner, Average Downtime per Year

Unquantified benefits. Benefits that are not quantified for this study include:

- **Improved uptime resulting in enhanced customer experience and brand reputation, as well as additional revenue.** Reduced annual technology incidents with proactive monitoring and automation, system performance increased with AIOps from Centerity due to both the visibility it provided of the entire IT landscape and a single platform to run the data analytics. The AI and ML components of AIOps accelerated the process of identifying both the root cause of problems and the time it takes to remediate incidents.

- **Consolidated software licensing fees from third-party monitoring tools.** AIOps from Centerity gives customers the option to retain existing monitoring tools or to replace them with its comprehensive platform. Either way customers benefit from the AI and ML components of the platform. For those that choose to consolidate their software footprint, the savings can be significant.

- **Enhanced professional development for operations teams.** A single platform which provides end-to-end solutions eliminates many monotonous and low-skill tasks. As a result, ITOM professionals are able to focus their attention on more complex, higher value assignments where AI and human intelligence are working together.

- **Increased confidence in performance measurements across the IT stack.** With performance metrics now visible across infrastructure, applications, and network teams, it is easier to observe when there is a problem in two or three places and the metrics are all correlated in real time. This helps to eliminate finger-pointing and expedite incident remediation.
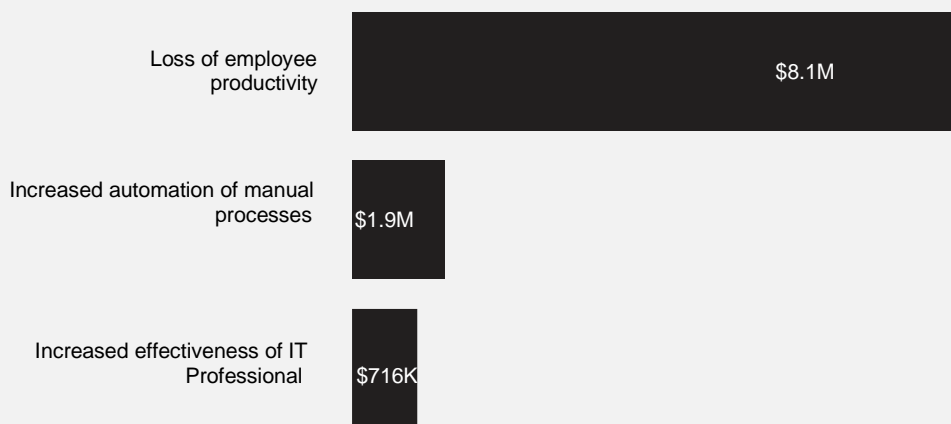
Costs. Risk-adjusted PV costs include:

- **Cost of software licensing fees totaling $1.7 million.** AIOps from Centerity structures its licensing fees based upon both the number of business-critical devices and the number of workloads. The fees are predictable and do not vary depending on whether the data source is from a third-party monitoring tool or directly from an device/object. The customer organizations in this study had a large, on- premises footprint with roughly 70,000 devices in total.

- **Cost of supporting infrastructure totaling $84,375.** Ongoing maintenance costs were tied to the distributed enterprise edge IT footprint and hybrid cloud environment.

- **Cost of training IT professionals totaling $63,400.** Initial training encompassed 15 hours for the customer's Level 1 and Level 2 employees.
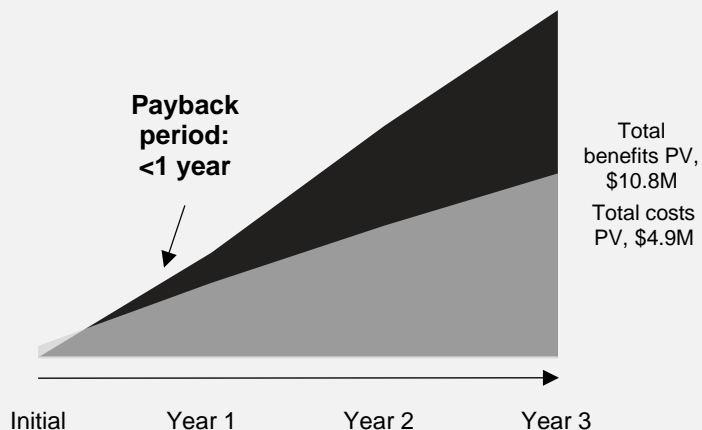
The financial analysis found that these customer organizations experienced benefits of $10,815,833 over three years versus costs of $5,856,480 adding up to a net present value (NPV) of $4,210,343 and an ROI of 72.54%.

ROI
73%

BENEFITS PV
$10.81M

NPV
$4.22M

PAYBACK
<1 year

Benefits (Three-Year)

Loss of employee productivity	$8.1M
Increased automation of manual processes	$1.9M
Increased effectiveness of IT Professional	$716K

Financial Summary

Payback period: <1 year

Total benefits PV, $10.8M

Total costs PV, $4.9M

Initial   Year 1   Year 2   Year 3

Unquantified Benefits

Improved uptime resulting in enhanced customer experience and brand reputation, as well as additional revenue.

Consolidated software licensing fees from third-party monitoring tools.

Enhanced professional development for operations teams.

Increased confidence in performance measurements across the IT stack.

ANALYZED ORGANIZATION

From the information gathered through the customer engagement, Centerity constructed a total financial benefits framework with the following customer profile:

- Industry: retail

- Revenue: $15.9 billion

- Total employees: 129,000

- Deployment: hybrid cloud, mostly on-premises, with 56 devices per site, 1162 sites, multiple 3rd vendors per site

- Performance monitoring tools: 5 tools across hand-held mobile computers, network, voice management systems, database, and applications.

Centerity also conducted a second customer study to obtain additional qualitative inputs. This customer was in the hospitality industry with 29K global sites with revenues of $19.2 billion. This customer relied primarily on Centerity's AIOps platform for monitoring its LATAM distributed enterprise edge IT landscape.

KEY CHALLENGES

Prior to implementing the AIOps platform from Centerity, the customer organization was utilizing multiple siloed monitoring tools and relying heavily on open- source software to run periodic checks on critical parameters across its application, network, and device resources. The combination and open-source software was complex, difficult to maintain, and required expertise that was expensive to employ.

challenges, including:

- **Limited view of the distributed enterprise edge IT environment and individual elements.** The customer organization's monitoring tools for applications and network were not able to cover the edge device diversity and complexity. With incomplete data on enterprise edge performance coming into IT operations, it was difficult to analyze the causes of system slowdowns or failures.

- **Difficulty achieving an end-to-end view.** Without a unified overall monitoring tool that could analyze data from systems that were tracked by other performance management tools, it was difficult to obtain a view from core to the distributed enterprise edge. Throughout our engagement, we heard IT say that despite all the technologies that were implemented to provide visibility end-to-end, they were having to look at five different platforms and when it came time to work on a critical situation, they found they had to log into multiple tools.

> **"Every performance management tool that gets added to the system needs at multiple people just for lifecycle support and doing the software updates. And then, you need a few more experts who know how to use the tool, and that's where things really start to fall apart."**
>
> *Director of IT, Infrastructure and Business Services*

The customer organization struggled with common

SOLUTION REQUIREMENTS/INVESTMENT OBJECTIVES

The customer organization searched for a solution that could:

- Provide greater transparency across the entire IT stack to help break down infrastructure and applications silos

- Reduce number of monitoring tools & alert noise

- Provide automation to minimize the need for manual intervention to identify and remediate incidents

- Establish a vendor-neutral platform that leverages AI and ML to analyze the root cause of problems and proactively monitoring assets across the distributed enterprise IT environment.

Business Case – Study Details:
- **Hybrid on-premise and cloud environments**
- **Large on-premises components (56 devices)**
- **70,000 devices across 1,162 a sites**
- **Based on 145,912 incidents per year (Level 1,2)**

USE CASE DESCRIPTION

To meet rising customer expectations in a business that is increasingly dependent on digital experiences, the customer needed an intelligent monitoring technology that could provide a unified view of all components of a service, from infrastructure to the business service. It was also important to leverage AI and ML to gain a deeper understanding on where to focus operational activities that would improve business performance. For this use case, Centerity has modeled benefits and costs over three years.

Analysis Of Benefits

Quantified benefit data

Total Benefits

Ref	Benefit	Year 1	Year 2	Year 3	Present Value
Atr	Increased Effectiveness of IT (L1, L2) Professionals	$ 232,884.66	$ 237,542.35	$ 242,293.20	$ 712,720.21
Btr	Decrease of Annual Contacts Through Automation	$ 604,581.64	$ 635,296.81	$ 667,572.43	$ 1,907,450.88
Ctr	Loss of Productivity Avoidance of Store Employee	$ 2,677,971.08	$ 2,731,530.50	$ 2,786,161.11	$ 8,195,662.70
	Total Benefits (Risk-Adjusted)	**$ 3,515,437.39**	**$ 3,604,369.67**	**$ 3,696,026.74**	**$ 10,815,833.80**

INCREASED EFFECTIVENESS OF IT PROFESSIONALS

Evidence and data. Based on the conducted study, by leveraging AIOps with Centerity, there was a significant increase in visibility across the distributed enterprise edge through proactive monitoring. Mundane operational monitoring tasks were determined to be eliminated and replaced by higher value assignments. The study estimated that IT operations team would have required two times as many workers to accomplish the same scope of work under this prior environment.

Modeling and assumptions. Based on the study conducted, Centerity assumes:

- The customer organization effectively avoids the cost of hiring additional professionals

- The fully loaded annual salary for an IT professional is ~$125,000

- It takes an estimated three months to realize value from the solution

Risks. The primary risk to realizing this benefit is the IT maturity level of the customer organization. Operations teams that already are leveraging a solution with AI and ML to analyze performance will not experience as large an increase in their scope of work.

To account for these risks, Centerity adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $10.8 million.

> **The scope now includes core to distributed edge end- to-end proactive monitoring, which is a transparent platform accessible across all business stakeholders that provides a unified view of IT environment health/alarms/issues, etc., and as a result, correlations can be done much more effectively.**
>
> *Centerity, internal analysis and multiple customer organization findings*

Increased Effectiveness of IT Professionals

Ref	Metric	Calculation	Year 1	Year 2	Year 3
ARt11.1	Number of L1,L2,L3 IT contacts	B27-D27	135,006	136,356	137,719
ARt11.5	Reduction in time spent of IT discovery call handling (Hrs)	M49	11,250	11,363	11,477
KSt7	Average hourly rate per person	C74, C75	$ 23.00	$ 23.46	$ 23.93
ARt11.4	Number of hours saved with proactive monitoring & per automation	J50/K50	2.00	2.04	2.08
Calculation	Percent of year decrease of contacts with AIOps automation	Composite	16.64%	16.30%	15.98%
Calculation	Percent of incidents captured	Composite	15.39%	15.70%	16.01%
Calculation	Benefit of increased automation of incident processes	Composite	$ 258,760.73	$ 263,935.95	$ 269,214.67
	Risk adjusted	↓10%			
Calculation	Increased automation of incident processes (risk-adjusted)		$ 232,884.66	$ 237,542.35	$ 242,293.20
	Three-year total benefit: $712,720.21			**Three-year present value: $606,224.60**	

INCREASED AUTOMATION OF MANUAL PROCESSES

Evidence and data. The complexity of IT systems has been exponentially increasing for the past several years. The customer organization struggled to keep up with the demand for professionals possessing the required modernized skill set. AIOps from Centerity helps the customer close this gap by automating manual processes.

Based on the current study, we found that many organizations are becoming very aggressive about hiring straight out of college and putting young recruits through training to turn them into software developers and administrators. The bottom line is that with Centerity's AIOps enables automation which accelerates that knowledge gap. Effectively, helping organizations take people with less experience, but still allow them to be productive. That lowers our overall cost of ownership and usage.

The customer organization studied tracks the number of manual incidents ("contacts") placed annually. Centerity's AIOps platform eliminated 11,250 incidents. In their first quarter, 2,813 manual tasks were automated.

> **The bottom line is it still comes down to eliminating manual intervention for tasks such as analyzing disparate datasets, holistic visibility across IT estate, reduction of alert noise, continuous improvement through operational data, and service restoration. That is where the real impacts are realized.**
>
> *Centerity, internal analysis of multiple customer engagements*

Centerity models this benefit based upon the number of hours saved per automation.

Modeling and assumptions. Based on the customer engagements, Centerity assumes:

- The customer organization automates 2,813 tasks per quarter

- Each automation saves 2 hours of labor

- The average hourly rate of IT professionals for handling incidents and ticket processing is $23

- The customer organization converts 50% of saved hours into productive activities

Risks. The savings associated with automating manual processes will vary based on:

- The number of automated tasks

- The hours saved per automation

- The fully burdened hourly rate of the IT professionals

To account for these risks, Centerity adjusted this benefit downward by 10%, yielding a three-year, risk- adjusted total PV of $712,720.21.

**Increased automation of manual processes:
17% of total incidents**

17%

11,250

reduction of incidents
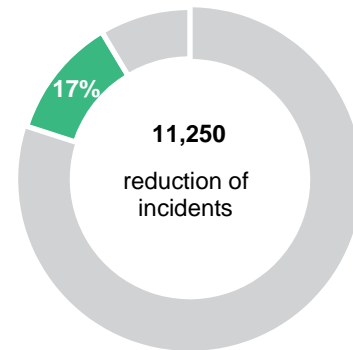
UNQUANTIFIED BENEFITS

Additional benefits that the customer experienced but was not able to quantify include:

REDUCED COSTS FOR MONITORING TOOLS

Evidence and data. Every time organizations add a monitoring tool to close the gap for infrastructure or application teams, additional resources are required to support the tool. The study leveraged AIOps from Centerity to avoid adding new tools and to consolidate the existing number of performance monitoring tools running in their environment.

The IT staff reported that the organization is currently using 5 different monitoring tools for their distributed enterprise edge IT landscape. With Centerity AIOps, the purpose-built platform enables a unified view across IT resources and 3rd party tools completely replacing and/or augmenting in a single platform.

Centerity modeled the benefits based upon the number of devices and monitoring tools supporting the infrastructure and estimating license cost per device/host/workload saved by consolidating the performance monitoring tool set into a unified AIOps platform.

Modeling and assumptions. Based on the customer study, Centerity assumes:

- There are 5 monitoring tools in production used for performance monitoring
- Cost of software licensing fees totaling $1.7 million annually.
- The customer organizations in this study had a large, on- premises footprint with roughly 70,000 devices in total.
- Cost of supporting infrastructure totaling $84,375.
- Consolidation of monitoring tools saves license and employee time learning and supporting the software $1,784,375.

Risks. The savings associated with reducing the costs for monitoring tools will vary based on:

- The number of performance operating tools in the prior environment.
- The number of devices and associated licenses per tool providing monitoring + tool support.
- The fully burdened hourly rate of the IT professionals operating the software.

To account for these risks, Centerity adjusted this benefit downward by 15%, yielding a risk- adjusted total PV of $1,439,220.

- **Improved uptime resulting in enhanced customer experience and brand reputation, as well as additional revenue.** Additional compute, network, and application uptime was critical to enhance digital customer experiences. According to Gartner, one hour of downtime in a key application or network could cost an organization between $10,000 to $20,000 per hour. Centeirty's AIOps provides both visibility across the entire IT landscape and a single platform to run data analytics. The AI and ML components of AIOps accelerates the process of identifying the root cause of problems and the time it takes to remediate the incident.

- **Consolidated software licensing fees from third-party monitoring tools.** AIOps from Centerity gives customers the option to retain existing monitoring tools or to replace them with its comprehensive platform. Either way customers benefit from the AI and ML components of the platform. For those that choose to consolidate their software footprint, the savings can be significant. This study confirmed that in this customer engagement the organization was able to consolidate some of their monitoring tools, but they did not provide the licensing fees under the environment.

- **Enhanced professional development for operations teams.** Based on this customer engagement, Cenertity's AIOps helped to reduce many of the monotonous, low-skill tasks that operators were performing across the IT stack. As a result, ITOM professionals focused their attention on more complex, higher value assignments where AI and human intelligence can work together. This contributed to improved employee productivity and reduced time handling IT incident trouble tickets.

Increased confidence in performance measurements across the IT stack. AIOps from Centerity helps customers develop a dashboard that could meet the needs of IT professionals as well as high-level executives and with a few clicks. This provides a quick view to address the needs based on the stakeholder's need and provides performance metrics were visible across infrastructure, applications, and network teams. Making it easier to observe when there is a problem in two or three places enabling correlation of metrics from disparate systems in real time. This increases confidence in the IT infrastructure and applications teams and help to eliminate finger- pointing and expedite incident remediation.

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement AIOps and later realize additional uses and business opportunities, including:

- **Scale the platform as needed.** Both enterprises that have a large infrastructure footprint and those that rely upon the solution to work at the scale necessary for a dynamic IT landscape realize significant scale and flexibility.

- **Accommodate data from new third-party monitoring tools.** The customers relied upon AIOps to collect data from many disparate sources. Its deep understanding of hundreds of technology solutions

provides the flexibility needed to keep pace with new monitoring solutions. Flexibility would also be quantified when evaluated as part of a specific projects.