

The Business Value of Dynatrace



Megan Szurley Senior Research Analyst, Business Value Strategy Practice, IDC



Katie Norton Senior Research Analyst, DevOps & DevSecOps, IDC



Nancy Gohring Research Director, Future of Digital Innovation Agenda Program, IDC



Table of Contents



Executive Summary	3
Business Value Highlights	3
Situation Overview	4
Dynatrace Overview	5
The Business Value of Dynatrace	6
Study Firmographics	6
Choice and Use of Dynatrace	7
Business Value and Quantified Benefits	9
IT Benefits Derived from Dynatrace	11
Application Performance Benefits from Dynatrace	14
Business Enablement Benefits from Dynatrace	18
ROI Summary	19
Challenges/Opportunities	20
Conclusion	21
Appendix 1: Methodology	22
Appendix 2: Supplemental Data	24
About the IDC Analysts	25

Executive Summary

This IDC Business Value Study describes the experiences of organizations that use Dynatrace for improved visibility into the performance and security of their application and infrastructure environments. With Dynatrace, the enterprises significantly improved the time it took to identify, remediate, and prevent performance problems, with a notable impact on the customer experience and cost to operate applications. Some customers also noted that savings were associated with improved efficiency, freeing up scarce resources and enabling application developers to focus on work that drives revenue and grows the business rather than spending time hunting for answers and resolving application problems.

Through a series of in-depth interviews, IDC conducted research that explores the value and benefits for organizations in using Dynatrace to improve infrastructure and application observability as well as security.

Based on an extensive data set and employing a specialized Business Value methodology, IDC calculates that these customers will achieve benefits worth an annual average of \$17.3 million on a per organization basis (\$2.6 million per 100 supported applications) and a three-year ROI of 451% by:

- Boosting the overall performance of platform management and operations conducted by platform engineering, DevOps, and DevSecOps teams
- Minimizing the occurrence and remediation of Sev1 and Sev2 outages and business disruption
- Improving application developer efficiency in problem-solving and remediation, as well as proactively addressing issues in a preproduction environment



Click highlights for related content in this document.

BUSINESS VALUE HIGHLIGHTS

\$2.6 million

average annual benefits per 100 supported applications

451%

three-year return on investment

6-month

payback period

53%

more efficient platform managers

28%

more efficient IT/ DevOps applications performance teams

18%

more productive developers

37%

fewer Sev1 and Sev2 outages annually

56%

less time to resolve Sev1 and Sev2 outages

72%

less revenue loss from Sev1 and Sev2 outages



3

Situation Overview

The enterprise application environment is growing rapidly. Not only are organizations adopting new applications that help them run the business more effectively and efficiently, they are also building more applications that deliver value to customers and build strong relationships with them.

While the business outcomes related to deploying these applications are notable — including revenue and market share growth — the commensurate impact on operations is a challenge for many organizations. IDC's *DevOps Practices, Perceptions, and Tooling Survey,* 2024, found that while most organizations can restore a service in between one hour and one day, the average hourly cost of a tier 1 application outage was over \$146,000. A one-day outage for such an application could cost an organization over \$3.5 million.

Businesses cannot afford to deliver insecure and poorly performing applications in an era when they are a core part of the enterprise software portfolio and business strategy. When slowdowns, outages, or security threats occur, teams must be able to determine the cause of the problem and resolve it very quickly.

Several challenges can slow down a resolution process, including:

- Difficulty discovering the root cause of a problem due to the complexity of cloud-native technologies and multicloud deployments
- Managing and deriving intelligence from the large volume of data generated by the growing volume of telemetry and other data generated by the increasing number and size of applications
- Visibility gaps, siloed data, and hindered cross-team collaboration resulting from the proliferation of individual observability and security tools

As a result of these challenges, organizations are looking to reduce the number of tools in use and integrate monitoring, observability, and security capabilities. In fact, IDC's *DevOps Practices, Perceptions, and Tooling Survey,* 2024, revealed that 30% of organizations have a shared model for observability and security, including tooling, teams, and data sources.

An integrated observability and security approach has the potential to close visibility gaps by offering insight into the entire technology stack required to deliver an application. In addition, a unified platform can serve to support collaboration across DevOps, security, IT operations, and engineering teams, as tool sharing allows the various teams to tackle a problem from the same vantage point.



In addition, AI can play a key role in solving the challenges that slow down problem resolution. Given the growing volume of observability and security data that organizations must collect, AI is increasingly required to analyze the information in order to point users to the root cause of a performance or security problem and offer solutions for how to repair it. AI capabilities embedded in observability and security tools must be reliable, in terms of delivering accurate insights, as well as fast, so that responsible teams are alerted about problems and offered solutions so that they can quickly solve issues, with the goal of preventing negative business impact wherever possible.

Dynatrace Overview

The Dynatrace platform delivers analytics and automation with the goal of unified observability and leverages AI to automate DevSecOps at scale. The solution is designed to allow users to proactively prevent issues before they impact end users.

The platform comprises several solutions, including:

• Infrastructure Observability:

Provides automated and intelligent observability across cloud and hybrid environments

· Application Observability:

Offers application performance monitoring (APM) for hybrid and cloud-native workloads and enterprise applications

• Digital Experience:

Monitors user experiences across channels and encompasses mobile and web applications

· Business Analytics:

Unifies business and IT data to enable data-driven decisions and automated improvements to business processes

• Automations:

Leverages observability and security data to drive workflow automations created with a visual workflow creator or automation as code

Security Protection:

Provides runtime vulnerability analytics and application protection to detect and protect against both third-party and code-level vulnerabilities, including zero-day attacks



Security Analytics:

Enables AI- and runtime-enhanced detection of, investigation of, and response to security events

Log Management and Analytics:

Collecting, parsing, and retaining logs for efficient searching, analysis, forensics, and governance

The Dynatrace platform is built on a causational data lakehouse — Grail — that supports observability, security, and business data in an indexless data store designed to scale to the needs of large enterprises. Data ingest into Grail is supported through multiple means, including OpenPipeline — a stream-processing technology that enables the filtering, enriching, and transformation of data in a compliant manner — and OneAgent. OneAgent automatically discovers what is running on the host and activates instrumentation. As OneAgent discovers all the application's components and dependencies in an environment, it builds an interactive and dynamic map called Smartscape. The Dynatrace platform's AI engine — Davis — leverages Grail and Smartscape to deliver predictive, causal, and generative AI capabilities. AutomationEngine supports advanced workflow automation, and AppEngine allows users to create and share custom applications.

The Business Value of Dynatrace

Study Firmographics

IDC conducted research that explores the value and benefits for organizations using Dynatrace to improve infrastructure and application observability and security. The project included seven interviews with organizations that use Dynatrace and have experience with and/or knowledge about the benefits and costs of using its various operations-specific modules. During the interviews, companies were asked a variety of quantitative and qualitative questions about the offering's impact on their IT, application development operations, core businesses, and costs.

Table 1 (next page) presents the study firmographics. The organizations that IDC interviewed had an average base of 49,000 employees and total average annual revenues of \$56 billion. On average, these companies had IT teams of 4,420 staff members and application development teams of 3,130 engaged in supporting 2,000 business applications. Five companies were based in the United States with the remainder in France and Italy.



From a vertical market standpoint, IDC's survey included organizations from the financial services (3), healthcare, retail, telecommunications, and security sectors.

TABLE 1
Firmographics of Interviewed Organizations

	Average	Median	Range
Number of employees	49,000	46,500	7,000–100,000
Number of IT staff	4,420	700	60–15,000
Number of full-time developers	3,130	2,500	50-9,000
Total number of business applications	2,000 1,600 100–6,500		100–6,500
Annual revenue	\$56B \$27B \$1B-\$200B		\$1B-\$200B
Countries	United States (5), France, Italy		
Industries	Financial services (3), healthcare, retail, telecommunications, security		

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Choice and Use of Dynatrace

The organizations that IDC interviewed described the decision criteria involved in their selection of Dynatrace to boost the performance of infrastructure, application monitoring/observability, and security operations. In discussing their criteria, interviewees called out a variety of benefits that informed their decision. Study participants appreciated that the solution allowed them to easily identify errors related to legacy and cloud-native workloads, middleware, or infrastructure and pinpoint root causes far more quickly than was possible previously. The benefits of Al-based, end-to-end application traceability and availability was cited as a major factor in the decision to adopt Dynatrace. Study participants also appreciated the fact that their developers were able to see exactly how their code was performing before going to production.

7

Study participants that Dynatrace offered the best combination of power, features, and customization to fit their specific tech stack observability and security needs. They elaborated on their selection criteria:

Ability to pinpoint issues (Telecommunications organization):

"We wanted to gain the ability to pinpoint potential root causes in matters of minutes, not over several hours after an incident has taken place."

Application performance analysis (Financial services organization):

"My organization decided to use Dynatrace in 2018 because at that moment we had a big project, and we decided to get a more powerful tool to analyze the application performance of our projects. We did a little scouting in the marketplace, and Dynatrace came up as the best solution."

Application traceability (Financial services organization):

"We deployed Dynatrace in 2018 because we were having issues with application availability. We pretty much had a critical outage once a day at that point. The inclusion of the Al and what we call the mobile-to-mainframe ultimately made us select Dynatrace. It gives us true end-to-end traceability of transactions."

Application stability (Financial services organization):

"My organization initially selected Dynatrace for our developers to see how their code was performing before going to production. It was more of a preproduction glimpse into the stability of their solutions. Over time, we started to leverage the product heavily across our critical digital assets, such as online banking and mobile banking."

Robust features and customization (Security organization):

"My organization evaluated a lot of industry players but really felt that Dynatrace had the best combination of power, features, and customization to fit our specific tech stack observability needs. We also appreciated their road map for growth, which was aligned with what we were looking for."

Table 2 (next page) provides a quantitative view of the organizational usage of Dynatrace across all companies at the time of interviews. On average, there were 657 business applications in use that were monitored by Dynatrace, with 569 internal Dynatrace users and 701,220 external users of applications monitored with Dynatrace. Almost four-fifths (78%) of the revenue generated by the apps was supported by Dynatrace in the survey base, indicating significant levels of use across all companies. Additional metrics are presented.



TABLE 2
Organizational Usage of Dynatrace

	Average	Median
Business applications	657	700
Datacenters	3	3
Data sources	5,909	1,500
Internal users of Dynatrace	569	700
External users of applications monitored with Dynatrace	701,220	1,000
% of revenue supported by apps running on Dynatrace	78%	88%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Business Value and Quantified Benefits

IDC's Business Value research evaluates and quantifies the benefits for companies in adopting Dynatrace to cost-effectively resolve performance and security issues. In addition, IDC found that adopting Dynatrace boosted the overall performance of platform engineering, DevOps, DevSecOps, and other application development teams. Improvements in application reliability in turn helped companies to minimize the occurrence of highly disruptive Sev1 and Sev2 outages. Further, lowering instances of unplanned downtime and being able to remediate events more quickly when they occurred helped to optimize user productivity.

All of these benefits combined to improve the productivity of Dynatrace users and business outcomes. Study participants offered these comments about the most significant benefits of Dynatrace:

Less reactive issue resolution (Security organization):

"Prior to the deployment of Dynatrace, my organization was spending a ton of time firefighting. We really wanted to get a tool that would help with the firefighting so that we could spend less time reacting to issues. Dynatrace has strong AI built into the platform,



and they have an automation guide that I'm a huge fan of. They're doing a lot of cool open source work at Dynatrace that is extending the capabilities of the platform that combines security and log analytics. It really is a powerful platform."

Singular platform approach to monitoring (Telecommunications organization):

"The most significant benefit of Dynatrace is that it gives my organization one monitoring and incident tool across our entire landscape. This allows us to shift the workforce from Germany to our non-German location. It's a massive reduction on operation costs."

Better issue identification and remediation (Retail organization):

"A substantial benefit of Dynatrace is one that my organization has found value in from the get-go. The application monitoring and performance monitoring of the solution help us identify performance issues with various products in our domain. It enables us to break down code and understand where to go to make improvements."

Critical function mapping (Financial services organization):

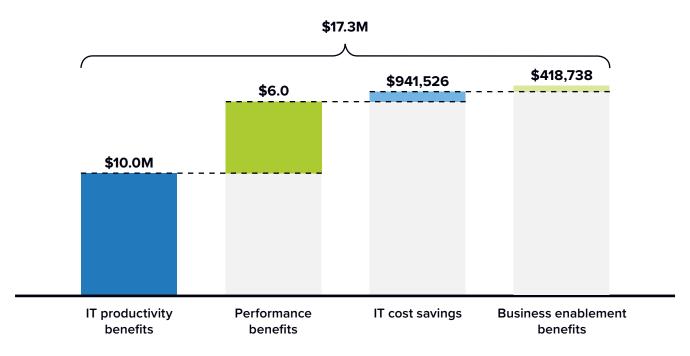
"The most significant benefit of Dynatrace is that it truly maps critical business functions, which gives us the pulse of the customer experience."

Figure 1 (next page) presents IDC's calculations of cumulative customer benefits after adoption of Dynatrace. As shown, average annual benefits were quantified at \$17.3 million per organization (\$2.6 million per 100 supported applications). The figure breaks down these Business Value benefits further in terms of IT productivity, performance benefits, IT cost savings, and business enablement.



FIGURE 1

Average Annual Benefits per Organization
(\$ per organization)



n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

For an accessible version of the data in this figure, see Figure 1 Supplemental Data in Appendix 2.

IT Benefits Derived from Dynatrace

The companies that IDC interviewed appreciated the platform's ability to empower developer teams to improve their decision-making processes. They also appreciated its ability to optimize code by using automated root cause identification and AI to quickly repair anomalies and maximize application performance.

The ability to easily and quickly check the relationship between applications in turn led to faster integration of those applications. Study participants elaborated on these benefits:

Better decision-making (Retail organization):

"Dynatrace gives my organization the ability to interrogate what the application is doing from a performance standpoint in a way that allows developers to make quicker decisions as to what they can improve upon."



Code optimization (Financial services organization):

"My organization is using Dynatrace to optimize the customer experience.

We are intercepting applications that are not performing well and optimizing the code.

We can immediately identify whatever problems we're having with applications availability.

Dynatrace has automatic root cause identification AI, which helps us quickly repair anomalies and maximize the availability of our applications."

Increase in full-stack monitoring (Healthcare organization):

"In our legacy environment, there was infrastructure monitoring versus full-stack monitoring. In our old environment, about 12% were running that full-stack monitoring. In moving to Dynatrace, we're at 34% using full-stack monitoring, and that's just people getting excited about the platform and jumping on. So that's a huge win."

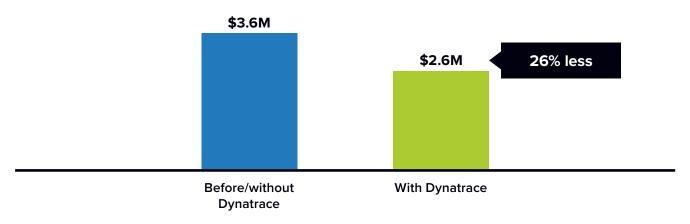
Improved application observability (Financial services organization):

"My organization uses Dynatrace for application observability. We can check the performance and stability of an application while we are developing, and also, it helps us to check the relationship between applications. As a result, we are faster at integrating applications. Dynatrace enables us to check every second how the software we've written is working, including how it's working in relation to the rest of the ecosystem. This is especially useful for new architecture — without a tool like Dynatrace, it would be really difficult."

IDC applied its Business Value methodology to quantify these and other improvements using the data sets provided by study participants. A variety of impacts were evaluated, beginning with observability or monitoring tool cost avoidances. In deploying Dynatrace, interviewed organizations reported that they significantly reduced costs in part by retiring and consolidating existing observability or monitoring software. Importantly, in decreasing costs and consolidating software, these organizations did not sacrifice performance. One participant working in the security industry offered this perspective: "My organization had a solution for infrastructure monitoring. It was all a hodgepodge mess. We moved to Dynatrace, and it does a better job of it." Figure 2 (next page) presents IDC's calculations for observability or monitoring tool cost avoidances, indicating a substantial 26% reduction in cost as compared with previous or alternative approaches.

FIGURE 2

Observability or Monitoring Tool Cost Avoidances
(\$ per organization)



n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

IDC then looked at how Dynatrace boosted the performance of various IT teams. Interviewed organizations reported that their IT platform management and administration teams gained significant efficiency by consolidating various monitoring tools into a singular, transparent platform. **Table 3** quantifies these benefits. After adoption, interviewed organizations needed 7.9 fewer full-time employees (FTEs) to manage their environments than with their pervious solution, thereby making it easier for staff to scale with organizational growth. This improvement resulted in a significant 53% efficiency gain that IDC valued at \$787,496 annually for each organization.

TABLE 3
Platform Management Team Efficiency Gain

	Before/Without Dynatrace	With Dynatrace	Difference	Benefit
FTE count	13.7	6.9	6.7	49%
Hiring avoidance	1.1	n/a	n/a	n/a
Total FTE count	14.8	6.9	7.9	53%
Value of staff time per year	\$1.5M	\$693,457	\$787,496	53%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024



IDC then drilled down on benefits related to application development productivity and performance. Study participants reported that their application development and DevOps teams benefited from the ability of Dynatrace to proactively help them identify code problems and test the performance of their applications during the production stage and before they became problematic for end users and/or customers.

After adoption of Dynatrace, IDC calculated that 21% less developer time was spent resolving application performance issues. As one study participant working in the security sector noted: "Dynatrace has been great for developers. We measured the cycle time for code signed to code complete, and we saw about an 18% increase in efficiency, which is huge because we're no longer spending time writing code testing. That step's been largely eliminated."

Table 4 shows that, after adoption of Dynatrace, interviewed companies saw an 18% productivity boost. This meant that teams of 596 developers could work at the equivalent productivity level of having 104.9 additional FTEs on staff. This benefit resulted in a very substantial annual productivity-based business value of \$10.5 million for each organization.

TABLE 4
Developer Productivity Gain

	Before/Without Dynatrace	With Dynatrace	Difference	Benefit
Equivalent productivity level, FTEs	596.4	701.3	104.9	18%
Value of staff time per year	\$59.6M	\$70.1M	\$10.5M	18%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Application Performance Benefits from Dynatrace

In their detailed conversations with IDC, study participants discussed benefits of Dynatrace regarding their application performance and the teams charged with monitoring. Interviewed companies appreciated that Dynatrace improved mean time to repair (MTTR) rates when outages occurred as the result of better application visibility. They also noted that the platform reduced application latency and allowed their teams to "work smarter not harder" by minimizing the number of people needed for problem resolution. The ability of the platform to help companies build better customer trust was also cited.



Study participants explained these benefits in greater detail:

Increased effectiveness in supporting customers (Healthcare organization):

"My organization is seeing a reduction in our MTTR due to application teams getting better visibility in what's going on. We are able to resolve issues before they impact our business or result in an outage because Dynatrace gave us critical information."

Significant reduction in MTTR (Telecommunications organization):

"It is simple what our biggest operational benefit was from using Dynatrace. This year, we've managed to reduce our time to repair from 4.5 hours in January to less than an hour in June, which is significant."

Ensured application performance (Security organization):

"My organization is a security company, and we can't afford to not deliver an excellent digital experience for our customers. We can't have systems go down. We can't afford heavy latency to users. We can't afford a breach. Our company depends on our electronic life, and Dynatrace really helps ensure that we're delivering those experiences to customers."

Ability to work smarter not harder (Financial services organization):

"Dynatrace has truly unified all sources running into one platform. My organization has been able to minimize the number of people that attack a problem while building better customer trust. Dynatrace has freed up cycles for us to do even better things and work smarter not harder."

IDC first looked at benefits for IT/DevOps application performance teams.

The staff monitoring the performance of applications benefited from automated root cause analysis, greater transparency, and the ability to leverage health metrics to proactively discover issues that could negatively impact users. One study participant working in the financial services industry offered this comment: "Operationally, Dynatrace has created transparency. We used to have a finger-pointing, blaming organization when you'd be dealing with a Sev1 issue between IT and developers. Now it's much more transparent where the issues are, and developers and IT are working together, in the same direction, to solve where that issue occurs."

After adoption, interviewed companies saw a 28% efficiency gain for these teams (Table 5, next page). This means that interviewed organizations needed 39 fewer FTEs with Dynatrace to manage the equivalent environment of their previous approach. These highly skilled individuals were tasked with supporting new business initiatives or could be stretched across monitoring a greater number of applications as businesses grew. This efficiency improvement resulted in an annual business value of \$3.9 million for each organization.



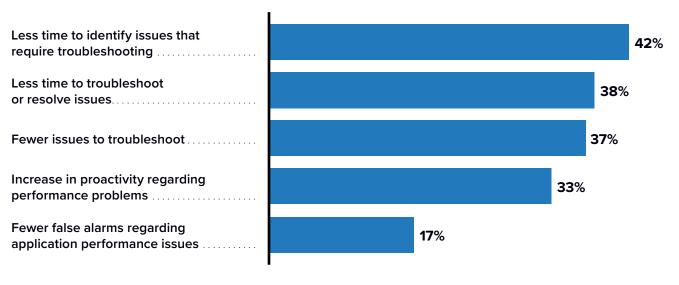
TABLE 5
IT/DevOps Application Performance Team Efficiency Gain

	Before/Without Dynatrace	With Dynatrace	Difference	Benefit
FTE count	137.9	99.0	38.9	28%
Value of staff time per year	\$13.8M	\$10.0M	\$3.9M	28%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Interviewed organizations also saw improvements in several core IT/DevOps performance metrics. IDC measured this by identifying and measuring a series of key performance indicators (KPIs). Interviewed organizations reported that by increasing transparency to more proactively get out in front of potential issues, Dynatrace substantially improved both infrastructure and application performance. As shown in **Figure 3**, after adoption, the greatest improvements were seen in less time to identify issues that require troubleshooting (42% less), less time to troubleshoot or resolve issues (38% less), and fewer issues to troubleshoot (37% fewer). Additional metrics are provided.

FIGURE 3
IT/DevOps Staff KPIs
(Percentage of respondents)



n = 7; Source: IDC Business Value In-Depth Interviews, March 2024



Another major benefit reported by study participants was a substantial reduction in unplanned downtime involving the business-critical applications that both internal end users and customers relied on. Incident severity levels measure business impacts, with Sev1 and Sev2 representing the greatest impacts and levels of disruption because they might involve serious security breaches or even the loss of a client-facing service. After adoption of Dynatrace, IDC found that not only did interviewed organizations experience far fewer Sev1 or Sev2 application outages annually, but, when outages did occur, their MTTR was significantly lower. In general, Dynatrace increased transparency within the organization to quickly spot the root cause of an outage. As one study participant working in the security industry noted: "Before deploying Dynatrace, my organization didn't know something was broken until users told us there was something broken. Now, we tell users something is going on before they even know it."

Table 6 provides key metrics on revenue loss associated with unplanned application downtime. Overall, the number of Sev1 and Sev2 outages occurring annually declined from 52 to 33, representing a significant reduction (37%). In addition, the time required to resolve these events when they occurred was reduced by 56%. In the aggregate, these improvements resulted in a loss avoidance that IDC valued at \$2.9 million per year.

TABLE 6
Application Unplanned Outages — Revenue Benefit

	Before/Without Dynatrace	With Dynatrace	Difference	Benefit
Number of Sev1 or Sev2 outages per year	52.4	33.0	19.4	37%
MTTR, hours	2.9	1.3	1.6	56%
% of downtime that is revenue impacting	46%	46%	n/a	n/a
Average revenue cost per hour of outage	\$380,216	\$380,216	n/a	n/a
Annual revenue loss benefit*	\$4.0M	\$1.1M	\$2.9M	72%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Business Enablement Benefits from Dynatrace

Interviewed organizations reported to IDC that they were able to achieve significant business gains from the deployment and use of Dynatrace. These benefits were directly traceable to the staff and application performance improvements described previously. Interviewed companies maintained better reliability for their business-critical applications and ensured that their performance did not interfere with the smooth digital experiences expected by customers and end users in today's markets. Better addressing business opportunities led in turn to better business results. Study participants cited specific benefits to their organizations such as gaining the ability to develop better products for end users and rapid improvement in the performance of their ecommerce sites.

Arriving at a deeper overall understanding of customer needs was also cited as a key benefit. Study participants elaborated:

Better products for end users (Security organization):

"We're delivering a better product to our internal customers who are supporting our external customers with Dynatrace. From an external customer standpoint, we've seen a rapid improvement in performance in our ecommerce site."

Deeper understanding of customers (Financial services organization):

"Dynatrace bridges the gap between technology and business because we're able to understand what customers can't do and how to solve for it."

Valued data reports (Retail organization):

"Dynatrace enables my organization to report data out of the platform that the business absorbs. The platform has provided data analytics on performance numbers and user monitoring reports from our digital website."

IDC then quantified the internal end-user impacts of the business enablement offered by Dynatrace. Interviewed organizations reported that Dynatrace improved the productivity of application end users, including analytics teams, business units, field workers, and other work groups, by increasing the performance and stability of mission-critical applications and features and providing a direct feedback link between business KPIs and the underlying application and infrastructure environment. Over time, this translated into more efficient business operations. After adoption, factoring in a 15% operating margin, interviewed companies saw a 1% end-user productivity boost, resulting in an annual business value of \$474,375 for each organization (Table 7, next page).

TABLE 7 Business Enablement — End-User Productivity Gain

	Before/Without Dynatrace	With Dynatrace	Difference	Benefit
Total FTE count	657.1	702.3	45.2	7%
Total FTE count, net	657.1	663.9	6.8	1%
Calculated value of productivity*	\$46M	\$46.5M	\$474,375	1%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

ROI Summary

In summary, Table 8 presents IDC's ROI analysis for study participants' use of Dynatrace. As shown, IDC projects that these companies will achieve three-year discounted benefits worth an average of \$40.9 million per organization (\$6.2 million per 100 supported applications) through better application performance, enhanced staff efficiencies, and improved business results. These benefits compare with total three-year discounted costs of \$7.4 million per organization (\$1.1 million per 100 supported applications). These levels of benefits and investment costs are projected to result in an average three-year ROI of 451% with a payback period of six months.

TABLE 8 **Three-Year ROI Analysis**

	Per Organization	Per 100 Supported Applications
Discounted benefits	\$41.0M	\$6.2M
Discounted investment	\$7.4M	\$1.1M
Net present value	\$33.5M	\$5.1M
ROI	451%	451%
Payback	6 months	6 months
Discount factor	12%	12%

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024



Challenges/Opportunities

Many organizations that are looking to modernize their approach to observability and security only focus on important tactical improvements, such as reducing the time it takes to identify and resolve performance and security problems. Additional value comes from measuring higher-level impacts to the business. A couple of user comments during this study hint at this potential, with organizations recognizing the value in using Dynatrace to optimize the customer experience and bridge the gap between technology and business. As organizations adopt new approaches to observability and security, they can extract more value related to achieving insights that may influence important business decisions. For instance, rich observability data can be used to guide product direction and development and optimize spend. This opportunity shouldn't be overlooked.

Data management and the associated costs of data collection are notable challenges facing organizations implementing unified observability and security solutions. The growing volume of observability data emitted from the application and infrastructure environment comes with a cost to collect, analyze, and store. IDC's *AlOps and Observability Survey*, 2023, found that more than half of respondents collect between 25% and 49% of observability data in duplicate with other teams. Emerging techniques, such as pipeline management capabilities, are available from some vendors. Enterprises that take advantage of these offerings should be able to better manage and control the flow of data, reining in costs while collecting the data required to improve visibility into complex IT systems.

Unified security and observability solutions, particularly those that were initially rooted in observability, often struggle to gain brand recognition with security teams. For example, IDC's *AlOps and Observability Survey*, 2023, found relatively low (19%) penetration of security products offered from observability vendors in security teams. Success in the security market requires observability vendors to overcome challenges such as ensuring the privacy and security of collected data, navigating a complex and evolving threat landscape, and gaining the trust of security professionals. Further, in many enterprises, each function is often a separate buying center. However, entering the security market can open new revenue streams and customer segments.

Conclusion

Enterprises rely on applications to run and drive their business more than ever before. With so much dependence on software, applications must be performant and secure. However, ensuring a top user experience and security posture is challenging due to growing application complexity. Adding one more tool to the mix won't work. Leading enterprises are intentionally modernizing their approach to observability and security by employing well-integrated solutions that intelligently manage and analyze huge volumes of observability and security data.

Those that do — including the companies IDC spoke with who have invested in the Dynatrace platform — find benefits beyond improved customer satisfaction. For instance, when a platform delivers unified visibility and has the intelligence to quickly surface and remediate the source of problems, developers are able to spend more of their time building new capabilities rather than resolving performance problems. By aggregating data across different domains, a unified observability and security platform can offer deeper insights through advanced analytics connecting business events to the underlying application and infrastructure environment. These insights can lead to better business decision-making and optimization of both IT performance and security strategies. The impact on the top and bottom lines is notable.



Appendix 1: Methodology

Table 9 presents a summary of IDC's Business Value calculations.

FIGURE 9 SUPPLEMENTAL DATA

Specific Calculations: Benefits from Use of Dynatrace

	Average Quantitative Benefit	15% Margin Applied	Calculated Average Annual Value*
Annual monitoring tool cost avoidance	\$941,526 annual network cost avoidance	No	\$941,526
IT platform management efficiency gain	53% more efficient worth 7.9 FTEs, \$100,000 salary	No	\$695,135
Development team productivity gain	17% higher productivity worth 58 FTEs, \$100,000 salary	No	\$9.3M
IT/DevOps application performance team efficiency gain	28% more efficient worth 38.9FTEs, \$100,000 salary	No	\$3.4M
Application unplanned outages — revenue benefit	\$2.9M annual revenue loss avoidance	Yes	\$2.6M
Business enablement — end-user productivity gain	1% higher productivity worth 6.8 FTEs, \$70,000 salary	Yes	\$418,738
Total average annual benefits	\$17.3M per organization per year *includes 4.2 months deployment time in year one		

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

IDC's standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of Dynatrace as the foundation for the model.

Based on interviews with organizations using Dynatrace, IDC performed a three-step process to calculate the ROI and payback period:

- 1. Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of Dynatrace. In this study, the benefits included IT cost reductions and avoidances, staff time savings and productivity benefits, and revenue gains.
- 2. Created a complete investment (three-year total cost analysis) profile based on the interviews. Investments go beyond the initial and annual costs of using Dynatrace and can include additional costs related to migrations, planning, consulting, and staff or user training.
- 3. Calculated the ROI and payback period. IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Dynatrace over a three-year period. ROI is the ratio of the net present value and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and productivity savings. For the purposes of this analysis, IDC has used assumptions of an average fully loaded salary of \$100,000 per year for IT staff members and an average fully loaded salary of \$70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.
- Further, because Dynatrace requires a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.



Appendix 2: Supplemental Data

This appendix provides an accessible version of the data for the complex figure in this document. Click "Return to original figure" below the table to get back to the original data figure.

FIGURE 1 SUPPLEMENTAL DATA

Average Annual Benefits per Organization

	Amount
IT productivity benefits	\$9.9M
Performance benefits	\$5.9M
IT cost savings	\$941,526
Business enablement benefits	\$418,738
Total	\$17.3M

n = 7; Source: IDC Business Value In-Depth Interviews, March 2024

Return to original figure

About the IDC Analysts



Megan Szurley Senior Research Analyst, Business Value Strategy Practice, IDC

Megan Szurley is a senior research analyst for the Business Value Strategy Practice, responsible for creating custom business value research that determines the ROI and cost savings for enterprise technology products. Megan's research focuses on the financial and operational impact of these products for organizations once deployed and in production. Prior to joining the Business Value Strategy Practice, Megan was a consulting manager within IDC's Custom Solutions division, delivering consultative support across every stage of the business life cycle: business planning and budgeting, sales and marketing, and performance measurement. In her position, Megan partners with IDC analyst teams to support deliverables that focus on thought leadership, business value, custom analytics, buyer behavior, and content marketing. These customized deliverables are often derived from primary research and yield content marketing, market models, and customer insights.

More about Megan Szurley



Katie NortonSenior Research Analyst, DevOps & DevSecOps, IDC

Katie Norton is a senior research analyst within IDC's DevOps and DevSecOps research practices. With her background in research administration and data analytics, Katie takes a data-first approach in her market analysis. Katie covers topics such as rapid enterprise application development, integrating security into the software development life cycle, and automated deployment and life-cycle/management strategies. In the area of DevSecOps, she explores how DevOps teams take ownership of security and examines the drivers of DevSecOps adoption. Katie has particular interest in adjacent topics such as mainframe DevOps, software supply chain security, feature flags/progressive delivery, and GitOps.

More about Katie Norton



Nancy Gohring
Research Director, Future of Digital Innovation Agenda Program, IDC

Nancy Gohring is Research Director for IDC's Future of Digital Innovation market research service. She focuses on software innovation programs in the enterprise and their potential to drive efficiencies into corporate processes, generate new revenue streams, respond to customer demand, and improve competitiveness. Her research examines ways that enterprises can best execute on the four pillars of software innovation—plan, source, develop, and distribute—and highlights leading enterprises that have developed successful new approaches to these competencies.

More about Nancy Gohring



IDC Custom Solutions

IDC Custom Solutions produced this publication. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis that IDC independently conducted and published, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. This IDC material is licensed for <u>external use</u> and in no way does the use or publication of IDC research indicate IDC's endorsement of the sponsor's or licensee's products or strategies.



IDC Research, Inc. 140 Kendrick Street, Building B, Needham, MA 02494, USA T +1 508 872 8200







International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives.

©2024 IDC. Reproduction is forbidden unless authorized. All rights reserved. CCPA