

Total Economic Impact

The Total Economic Impact™ Of Dataminr First Alert

Cost Savings And Business Benefits Enabled By First Alert

A FORRESTER TOTAL ECONOMIC IMPACT STUDY COMMISSIONED BY DATAMINR, JULY 2025

The Forrester logo is displayed in white, serif, all-caps font within a black rectangular box. The box is positioned on the left side of a large, abstract graphic that features flowing, organic shapes in various shades of green and teal, set against a black background.

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Executive Summary

In today's volatile risk landscape, public sector organizations face a deluge of fragmented and noisy open-source signals that undermines their situational awareness; overwhelms leaders, field officers, and analysts; and delays first response — rendering them stuck in a reactive posture. Organizations need an automated critical-event discovery platform that unifies real-time data and surfaces actionable insights for faster event detection and response — ultimately allowing them to achieve mission-critical objectives.

Dataminr First Alert increases the speed of decision-making with a real-time critical-event discovery solution for the public sector. Powered by advanced AI, Dataminr First Alert detects early indicators of crises — such as natural disasters, public safety incidents, health risks, transportation accidents, infrastructure incidents, and local or global events — to enable public servants to respond quickly to protect lives and communities.

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

414%

Return on investment (ROI) ⓘ

\$1.2M

Net present value (NPV) ⓘ

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed six decision-makers with experience using First Alert. For the purposes of this study, Forrester aggregated the experiences of the interviewees and combined the results into a single composite organization, a regional public sector entity with a 15-person operations center and an annual IT budget of \$50 million.

Interviewees said that prior to using First Alert, their organizations had a highly manual and fragmented approach to event detection and situational awareness. Analysts had to sift through multiple open-source platforms — such as social media, government alerts, public forums, and news sites — using inefficient, error-prone workflows. Prior attempts to improve these processes yielded limited results, leaving teams struggling with limited situational awareness, slow and reactive critical event identification, lack of continuous 24/7 information processing, and difficulty scaling to keep pace with the evolving public safety landscape. These shortcomings created critical situational awareness gaps, delayed risk response, hindered collaboration across departments and agencies, and ultimately hindered the organizations' ability to meet mission-critical objectives effectively and proactively.

After the investment in Dataminr First Alert, the interviewees' organizations achieved significant improvements in real-time critical event discovery, first response, and situational awareness by automating the coverage and analysis of diverse public data sources. This enabled faster, more accurate identification and prioritization of critical events, while reducing the manual burden on analysts and streamlining workflows across departments.

Key results from the investment include accelerated critical event discovery and identification, faster response of emerging events, improved analyst readiness and productivity, and more efficient situational reporting. These outcomes collectively enhanced the organizations' ability to respond proactively to critical events, safeguard public safety, and meet mission-critical objectives with greater confidence and speed.

Key Findings

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

- **Reduced time spent collecting and sifting through publicly available information to identify potential critical events by up to 70%.** Dataminr First Alert allows the composite organization to shift from labor-intensive, manual

critical event discovery to real-time alerts sourced from a wide range of public platforms. Over three years, its operations analysts avoid more than 10,000 hours of manual review, which totals \$191,000 in value.

- **Reduced volume of irrelevant signals by 90%.** Before Dataminr First Alert, analysts manually reviewed high volumes of information to distinguish credible signals from irrelevant noise. With First Alert, the composite organization receives AI-generated alerts filtered and prioritized based on mission relevance, geography, and other key factors. Operations analysts avoid 54,692 hours of manual analysis over three years, which totals \$1.0 million in value.
- **50% reduction in first response time.** Prior to Dataminr First Alert, event discovery and common operating picture development delays led to slower, more resource-intensive event detection and response. With early, accurate alerts, the composite organization accelerates response times by 50% to enable more efficient use of emergency personnel. Faster first response reduces operational costs and risk exposure to deliver a total value of \$21,000 over three years.
- **Streamlined situational reporting productivity gains worth \$99,000 over three years.** Dataminr First Alert automates the collection and filtering of information from multiple public data sources to reduce the manual effort that operations analysts spend consolidating and verifying information. This enables analysts to cut time spent on recurring situational reports by 50% and major situational reports by 75%. As a result, the composite frees up over 5,000 analyst hours over three years and accelerates the delivery of accurate, timely insights.
- **Training time for new operations analysts reduced by 90%.** The composite organization accelerates analyst readiness by using Dataminr First Alert's automated alert triage and easy-to-use interface, which helps new analysts quickly recognize and prioritize relevant events aligned with organizational goals. This accelerates new analysts' time to productivity and frees up director time previously dedicated to training. Over three years, this benefit is worth \$117,000.

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

- **Improved mission-critical outcomes.** The composite organization strengthens its ability to save lives, prevent incidents, and improve public safety by receiving tailored, real-time alerts that convert vast unstructured data into focused, actionable information. This heightened situational awareness enables better anticipation of emerging public safety events and more proactive responses aligned with organizational priorities.
- **Cross-functional collaboration.** By having a reliable, centralized source of real-time information, the composite organization improves information sharing and coordination within departments and with external partners. This connectivity breaks down silos to foster more effective joint responses and improved situational awareness across multiple stakeholders.
- **Improved preparedness for travel and on-site event assessments.** The composite organization leverages real-time alerts to assess breaking events ahead of and during travel or deployments, enabling dynamic adjustments that minimize exposure to public safety. This proactive assessment supports safer and more efficient movement of personnel in complex or unstable environments.

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

- **Fees to Dataminr totaling \$273,000 over three years.** The composite organization incurs annual licensing fees that increase over time as the number of users grows and the platform is expanded across teams. Pricing is based on a per-seat model with a moderate annual increase to reflect added users.
- **Training and vendor management costs of \$7,000 over three years.** Initial training involves a two-hour session for all users, with reduced training in subsequent years limited to new users due to churn and growth. Vendor management consists of a single team member who maintains communication with the Dataminr team for ongoing support and platform adjustments.

The financial analysis that is based on the interviews found that a composite organization experiences benefits of \$1.4M over three years versus costs of \$280,000, adding up to a net present value (NPV) of \$1.2M and an ROI of 414%.

90%

Reduction in volume of irrelevant signals due to AI-driven signal triage and prioritization

“Dataminr First Alert gives us everything we need, when we need it, in the form of easily digestible, actionable insights.”

Director, safety and security, education

“Before Dataminr First Alert, we could not react to [an incident] until it was already happening. Now, we’re able to proactively identify key priorities based on [public safety] trends. It’s allowing us to save a ton of lives.”

Commander, defense

Key Statistics

414%

Return on investment (ROI) ⓘ

\$1.4M

Benefits PV ⓘ

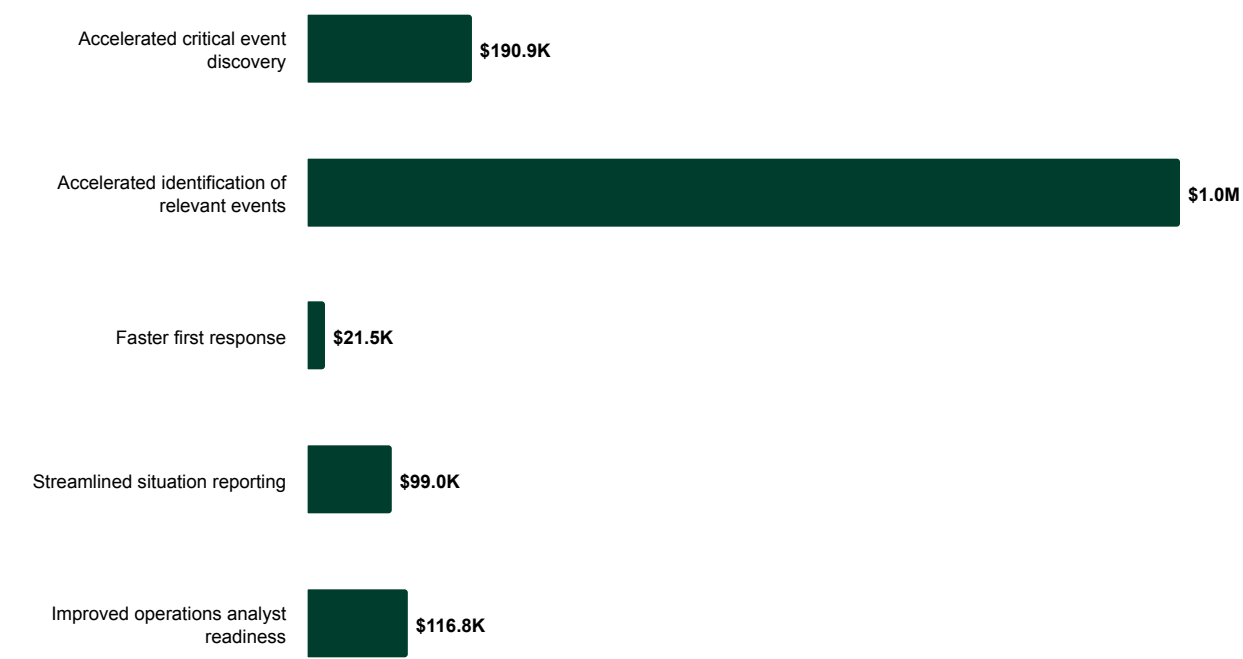
\$1.2M

Net present value (NPV) ⓘ

<6 months

Payback ⓘ

Benefits (Three-Year)



The Dataminr First Alert Customer Journey

Drivers leading to the First Alert investment

Interviews				
Role	Industry	Employees	IT budget	Dataminr First Alert Licenses
Director, safety and security	Education	3,000	\$60M	5
Director, operations	Law enforcement	2,500	\$45M	20
Senior detective	Legal services	2,000	\$25M	5
Commander	Defense	1M+	\$50B	50
Supervisor, operations Manager, operations	Law enforcement	1,500	\$4M	25

Key Challenges

Interviewees described a highly manual, disjointed approach to critical event discovery and situational awareness before adopting Dataminr First Alert. While many organizations relied on a broad mix of open-source platforms — including social media, public forums, government alerts, and online news — the process of ingesting and filtering this data for actionable information was cumbersome, fragmented, and largely reactive. Teams lacked the tools and infrastructure to continuously process a wide range of data sources in real time, which resulted in critical gaps in situational awareness. These gaps directly impacted the organizations’ ability to safeguard physical safety, respond swiftly to emerging events, and achieve mission-critical outcomes, such as preventing incidents and saving lives amid rising and increasingly complex threats to the safety of people and assets.

Interviewees noted how their organizations struggled with common challenges, including:

- **Cumbersome and time-consuming manual critical-event discovery workflows.** Prior to using First Alert, operations analysts were responsible for manually discovering and identifying relevant public safety across a wide range of open-source platforms. This required setting up data feeds, configuring and maintaining keyword filters, and searching across numerous channels, which were both inefficient and error prone. Teams often had to juggle multiple sources to piece together relevant information, which delayed the identification of critical information and increased the likelihood of oversight.
 - The commander in defense explained: “Before [First Alert], we had one to two analysts [searching] through various open-source platforms on a daily basis to try to find the appropriate publicly available information that would give us some sort of description of an operational environment. It became increasingly difficult to do this because the workload was more than one or two analysts could handle.”
- **Limited breadth and fragmentation of information sources.** Organizations struggled to consolidate and ingest the wide variety of data streams essential for comprehensive situational awareness. Reliance on disparate platforms led to incomplete risk assessments, which made it difficult to get a real-time, holistic view of potential public safety events. This fragmentation hindered the ability to correlate signals from different sources quickly and accurately.
 - The supervisor of operations in law enforcement shared: “Before First Alert, our analysts used a combination of open-source research across many different platforms. Since we have several use cases and areas of interest, they would use multiple sites at a given time to piece together information to try to detect potential [events]. They would sometimes get four or five alerts on the same topic coming in from different sources, which made it difficult to reconcile information to figure out what was most accurate.”
 - The director of safety and security in education explained: “In the prior environment, we were primarily pulling from social media. We weren’t getting any alerts from local government or news outlets. First Alert gives us much

wider coverage both domestically and internationally. It has a really comprehensive set of sources that it uses to inform us.”

- **Inadequate infrastructure and personnel to support 24/7 data source coverage at scale.** Without automation or robust technology support, operations analyst teams could not feasibly maintain continuous data ingestion across all relevant channels. This limitation resulted in blind spots during off-hours or high-volume events that reduced organizations’ ability to detect emerging events promptly and respond proactively.
 - The director of safety and security in education said: “It would be impossible to get approval to staff enough people to provide 24-hour coverage. For global operations, round-the-clock shifts are necessary; overnight, late-night, all of it. Dataminr gives us complete coverage no matter what time it is.”
- **Difficulty detecting nuanced, multilingual, and multimedia events.** Interviewees noted that manual methods lacked the sophistication to identify subtle or coded signals of emerging events — especially those embedded in nontext formats, foreign languages, or evolving jargon. This gap left organizations vulnerable to emerging risks to public safety that were masked by language barriers or complex contextual cues. This limited the comprehensiveness of critical event discovery efforts and, ultimately, the ability to respond to critical events before they escalated.
- **Inability to scale critical event discovery amid growing threats to the safety of people and assets.** As the volume of both global and local incidents increased, existing manual approaches could not scale. Rising data volumes overwhelmed analysts as static filters and keyword lists struggled to adapt to new and evolving event patterns, which resulted in critical information gaps and slower response times.
 - The director of operations in law enforcement said: “We wanted to free up our analysts’ time to stay focused on the increasing volume of incoming [information] and requests. We’ve been able to increase their productivity level with the same number of people to be able to keep up with the pace of information coming through. We’re doing more with less.”
- **Limited cross-functional collaboration and information sharing.** Interviewees highlighted challenges in efficiently sharing timely critical event information across departments or with external stakeholders, such as notifying schools in different countries or coordinating with local agencies. This siloed communication hindered proactive responses and complicated coordinated efforts to protect people and assets across jurisdictions.
 - The director of operations in law enforcement shared: “One of the most important things we were looking for with the investment [in First Alert] was information sharing. We cover a large, multicounty area with a lot of different agencies and critical infrastructure, so we’re working to improve how we used to operate. [Responses to critical events] showed us that we weren’t collaborating the way we should have been, and the whole idea now is to make sure we’re doing better.”

Investment Objectives

The interviewees searched for a solution that could:

- Improve physical safety and achieve mission-critical outcomes (e.g., lives saved, incidents prevented, enhanced public safety).
- Accelerate critical event detection and reduce response times.
- Eliminate manual efforts involved in critical event discovery, analysis, and reporting across diverse and dynamic data sources.
- Deliver precise, actionable information to enable informed decision-making and optimal allocation of resources.
- Meet stakeholder expectations through proactive and continuous evaluation of potential risks to public safety.
- Support broader governmental and state or city initiatives to adopt new technologies and align with public safety goals.

“Our prior environment had more information than we could look at in a full day. It was like searching for a needle in a haystack. Something would have to jump out at you to be able to identify a potential risk [to public safety]. It was a very inefficient and ineffective process.”

Director, safety and security, education

Why Dataminr First Alert?

Interviewees cited the following reasons for choosing to invest in First Alert:

- User-friendly interface for nontechnical users.
- Comprehensive, multisource integration (e.g., public sources, images, audio streams, machine sensor data).
- Real-time translation of more than 160 languages.
- Configurable alerts that deliver context-specific information to relevant users.
- Organization-wide delivery of alerts via APIs/connectors.
- Continuous AI improvement by dedicated research, AI, and domain expert teams.
- Direct access to expert Dataminr support.

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 interviewees' organizations, 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 regional public sector entity with an IT budget of \$50 million. Within this organization, a dedicated operations center of 15 employees — including 11 operations analysts and four operations directors — focuses on real-time information sharing to enhance collaboration across departments and agencies and accelerate the response to critical events. The operations center plays a critical role in supporting the larger organization's mission to safeguard public safety, prevent incidents, and respond swiftly to emerging events across its jurisdiction.

Prior to Dataminr First Alert, the composite's approach to critical event discovery, first response, and situational awareness was highly manual and fragmented, as operations analysts manually searched through a range of publicly available information to uncover potential risks to public safety. The composite did not previously use a real-time event detection and alerting solution to support this process. The organization sought a solution that could automate this process with more comprehensive, real-time coverage to enable faster, more informed decision-making and improve its ability to anticipate and respond to critical events.

- **Deployment characteristics.** The operations center begins using Dataminr First Alert with 15 licenses. As infrastructure and information processing needs increase, the number of licenses increases to 17 users in Year 2 and 18 users by Year 3. This also enables the composite to support responding to an increasing number of risks to the safety of people and assets and requests for information-sharing from other departments and agencies. Deployment is fast and low effort — Dataminr completes the setup in under a day and provides training and support. The platform is fully integrated into the center's existing workflows within a week.

KEY ASSUMPTIONS

- Operations center within a regional public sector organization
- \$50 million IT budget
- 15 Dataminr First Alert licenses

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	Accelerated critical event discovery	\$64,800	\$77,220	\$90,720	\$232,740	\$190,887
Btr	Accelerated identification of relevant events	\$354,375	\$407,543	\$468,653	\$1,230,571	\$1,011,077
Ctr	Faster first response	\$7,480	\$8,500	\$10,200	\$26,180	\$21,488
Dtr	Streamlined situation reporting	\$38,700	\$39,870	\$41,040	\$119,610	\$98,966
Etr	Improved operations analyst readiness	\$46,980	\$46,980	\$46,980	\$140,940	\$116,832
	Total benefits (risk-adjusted)	\$512,335	\$580,113	\$657,593	\$1,750,041	\$1,439,250

Accelerated Critical Event Discovery

Evidence and data. Interviewees shared that, prior to Dataminr First Alert, critical event discovery was a repetitive, reactive, and often overwhelming process. Analysts had to comb through disparate open-source platforms — including social media, news outlets, government alerts, and online forums — to identify potential risks to public safety. This created inefficiencies and exposed teams to information overload. With Dataminr First Alert, analysts received real-time, high-fidelity alerts that significantly reduced the need for manual collection and review. Interviewees noted that this allowed analysts to shift their focus from sifting through large volumes of data to higher-value tasks, such as assessing event relevance, prioritizing response actions, and advising decision-makers. Over time, as the system improved signal quality and filtering, organizations reported further reductions in time spent on manual discovery efforts.

- The senior detective in legal services said: “Having First Alert has allowed me to do my job more effectively because it pulls information from a variety of platforms, including social media, newspapers, and the dark web, and sends me alerts based on the filters we’ve set. It’s been a huge help. I could never have come close to finding or addressing thousands of references on my own without First Alert.”

The senior detective continued: “To justify the investment in First Alert to our senior leaders, we explained that it would take at least two additional personnel to deliver the same level of information and situational awareness. They’d have to view publicly available information continuously throughout the day just to keep up with the volume, and even then, I think saying it would only take two or three people was generous. It would take many more than that.”

- A director of operations in law enforcement reported that, despite a 20% to 30% increase in analyst workload over the past two years, First Alert has allowed their team to successfully absorb the increasing number of risks to the safety of people and assets without the need to add headcount. The director said: “We’re seeing more requests for information coming in both from partners in surrounding areas and from within our own city. At the same time, we’re supporting more large-scale special events that each have their own risk assessment to ensure public safety. We’ve got multiple major venues and recurring events, from sports to concerts to university gatherings. For every performer or high-profile event, we’re looking at what kind of events may have occurred in other cities and using that [information] to adjust our security posture here. The goal is to stay ahead and make it [less likely] for the same kind of [risks to public safety to surface] in our area.”
- The director of safety and security in education said that they were able to eliminate a full-time resource that was previously dedicated to parsing through information signals during major events, explaining: “We no longer have someone dedicated solely to scanning [public information online]. It was a huge task because it was impossible to

catch everything. Now, alerts go to multiple people across our organization, so the responsibility is distributed. We don't have to worry about potential issues falling through the cracks anymore."

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization's operations center has a team of 10 operations analysts in Year 1, which grows to 11 in Year 2 and 12 in Year 3 as the number of risks to the safety of people and assets increases and the organization expands its data source coverage.
- Prior to Dataminr First Alert, each analyst spent 40 hours per month manually collecting and sifting through publicly available information to identify potential critical events.
- With Dataminr First Alert, analysts reduce time spent on critical event discovery by 60% in Year 1, 65% in Year 2, and 70% in Year 3.
- The average fully burdened hourly rate of an operations analyst is \$50.
- For this benefit, the composite has a productivity recapture rate of 50%. Employees spend most of the time they save on activities that support the organization's mission, but they do not dedicate all reclaimed time to value-added work.

Risks. This benefit will vary among organizations based on:

- Operations analyst team size.
- Time spent collecting and sifting through publicly available information to identify potential safety events before Dataminr First Alert. This may vary depending on factors such as the organization's scope of area served, volume and complexity of information signals, number of sources consumed, and the maturity of existing information-processing workflows.
- Average fully burdened hourly rate of an operations analyst.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$191,000.

10,344 hours

Time spent collecting and sifting through publicly available information to identify potential critical events avoided with Dataminr First Alert over three years

70%

Reduction in time spent collecting and sifting through publicly available information to identify potential critical events with Dataminr First Alert by Year 3

Accelerated Critical Event Discovery					
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Operations analyst team	Composite	10	11	12
A2	Time spent collecting and sifting through publicly available information to identify potential critical events per month per analyst before Dataminr First Alert (hours)	Composite	40	40	40
A3	Reduction in time spent collecting and sifting through publicly available information to identify potential critical events with Dataminr First Alert	Interviews	60%	65%	70%
A4	Time spent collecting and sifting through publicly available information to identify potential critical events avoided with Dataminr First Alert (hours)	A1*A2*12 months*A3	2,880	3,432	4,032
A5	Average fully burdened hourly rate of operations analyst	Composite	\$50	\$50	\$50
A6	Productivity recapture	TEI methodology	50%	50%	50%
At	Accelerated critical event discovery	A4*A5*A6	\$72,000	\$85,800	\$100,800
	Risk adjustment	↓10%			
Atr	Accelerated critical event discovery (risk-adjusted)		\$64,800	\$77,220	\$90,720
Three-year total: \$232,740			Three-year present value: \$190,887		

Accelerated Identification Of Relevant Events

Evidence and data. Interviewees reported that Dataminr First Alert significantly accelerated the identification of relevant events after the initial discovery stage. Before implementing First Alert, operations analyst teams were routinely overwhelmed by the volume of open-source information across platforms including social media, blogs, public reporting feeds, and local and international news. Analysts spent considerable time manually triaging raw data to distinguish credible public safety events from background noise, misinformation, and low-priority activity. Some interviewees noted that, given the overwhelming volume and velocity of publicly available information, they had to prioritize manageable areas of coverage while accepting that some critical signals could be overlooked.

With First Alert, analysts received AI-generated, real-time alerts that had already been filtered, clustered, and prioritized based on relevance to their organization's mission, geography, and areas of interest. The platform's AI models automatically removed noisy or redundant signals, surfaced new developments, and grouped related items to reduce manual effort. As a result, analysts could quickly identify and validate high-priority risks to public safety, often within minutes of emergence. With the productivity gains they experienced, interviewees explained that analysts were able to dedicate more time to high-value activities such as case analysis, interagency collaboration, and producing situation reports.

- The commander in defense noted that previously, they personally spent 3 to 6 hours daily assessing the operational environment and prioritizing critical information — in addition to the time that their analysts also spent on the effort. The commander explained: “Time is an important asset in this line of work. The [First Alert] tool allows us to use our time wisely. We’re spending less time on “what ifs” and “what do we think is happening” and more time focused on critical preparation activities like rehearsals, pre-mission checks, and inspections.”
- The director of operations in law enforcement explained: “We have fewer items to [analyze] because the most relevant ones are now automatically coming to us. We are a lot better informed about our situational awareness than we were in the past, much more quickly.”

The director of operations continued: “We invested in First Alert to help our analysts make more efficient use of their time. We saw it as a way to reduce the labor required to search through [public data] and find relevant information more quickly. At the time the decision was made, I was new in my role. Our analysts brought it forward as a tool they needed to streamline their work. My job is to support the team and ensure they have the right tools, so I worked with them to secure funding and implement it. They’ve since started using it and really value what it brings to their workflow. They’re doing way less manual effort now.”

- The supervisor of operations in law enforcement shared that First Alert helped reduce time sorting through irrelevant alerts by helping filter nonactionable content, noting: “We had a case where the system was pulling in a large volume of content, some of which was unrelated [to our mission]. We flagged this to the Dataminr team, and they were able to quickly adjust the backend parameters. That cut down on the noise and saved our analysts time by narrowing the focus to what we actually needed to be aware of.”
- The director of safety and security in education reported a significant reduction in irrelevant signals after implementing First Alert. In a single event, the number of signals decreased from hundreds of thousands to just 25 alerts. The director explained: “Our previous setup was really cumbersome to manipulate. We had to scroll through long lists of social media posts, which made it difficult to filter out false positives, especially for incidents that included terms that were seemingly relevant but had nothing to do with our area of responsibility and that constantly triggered alerts. The Dataminr team has been much more effective at helping us fine-tune the system to remove those kinds of irrelevant alerts so we can stay focused on actual public safety events.”

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization’s operations center has a team of 10 operations analysts in Year 1, which grows to 11 in Year 2 and 12 in Year 3 as the number of risks to the safety of people and assets increases and the organization expands its data source coverage.
- Prior to using Dataminr First Alert, operations analysts manually discovered 150,000 signals in Year 1 by searching across open-source platforms such as social media, blogs, and public news feeds. This total includes both relevant and irrelevant content, all of which required analyst time to review. As the overall number of risks to the safety of people and assets increases, this number rises by 15% annually to 172,500 in Year 2 and 198,375 in Year 3.
- With Dataminr First Alert, the organization experiences a 90% reduction in the volume of irrelevant signals due to AI-driven signal triage and prioritization.
- On average, it took 7 minutes to manually research each signal prior to implementing Dataminr First Alert.
- The average fully burdened hourly rate of an operations analyst is \$50.
- For this benefit, the composite has a productivity recapture rate of 50%. Employees spend most of the time they save on activities that support the organization’s mission, but they do not dedicate all reclaimed time to value-added work.

Risks. This benefit will vary among organizations based on:

- Signal volume before Dataminr First Alert. This may vary depending on factors such as the organization’s scope of area served, the number and diversity of ingested sources, the sector-specific risk landscape, and maturity of existing information-processing workflows.
- Average time of manual analysis per signal. This may vary depending on factors such as signal complexity, analyst experience, and protocols.
- Average fully burdened hourly rate of an operations analyst.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$1.0M.

54,692 hours

**Time spent analyzing irrelevant signals avoided with
Dataminr First Alert over three years**

“First Alert helped us reduce the time we spend searching for the right information. Rather than searching across 10 different sources, First Alert compiles a list of relevant items from the day for us to view in one place. This saves us significant human hours.”

Supervisor, operations center, law enforcement

Accelerated Identification Of Relevant Events					
Ref.	Metric	Source	Year 1	Year 2	Year 3
B1	Signal volume before Dataminr First Alert	Composite	150,000	172,500	198,375
B2	Reduction in the volume of irrelevant signals with Dataminr First Alert	Interviews	90%	90%	90%
B3	Signals requiring manual analysis avoided with Dataminr First Alert	B1*B2	135,000	155,250	178,538
B4	Average time for manual analysis per signal (minutes)	Interviews	7	7	7
B5	Time on analyzing irrelevant signal avoided with Dataminr First Alert (hours) (rounded)	(B3*B4)/60 minutes	15,750	18,113	20,829
B6	Average fully burdened hourly rate of operations analyst	A5	\$50	\$50	\$50
B7	Productivity recapture	TEI methodology	50%	50%	50%
Bt	Accelerated identification of relevant events	B5*B6*B7	\$393,750	\$452,825	\$520,725
	Risk adjustment	↓10%			
Btr	Accelerated identification of relevant events (risk-adjusted)		\$354,375	\$407,543	\$468,653
Three-year total: \$1,230,571			Three-year present value: \$1,011,077		

Faster First Response

Evidence and data. Interviewees explained that, prior to adopting Dataminr First Alert, public safety events were often identified too late — sometimes hours after initial signals emerged. This delay was driven in part by slow critical event discovery and common operating picture development, which hindered timely situational awareness and first response. By the time their teams relayed information to law enforcement agents and other emergency personnel, the window for early containment had often closed, leading to more complex, resource-intensive responses and greater operational risk.

With Dataminr First Alert, interviewees’ organizations experienced a significant reduction in time to respond to verified events. The platform’s ability to surface high-priority alerts earlier and with greater accuracy meant that field teams could intervene faster — often while an incident was still developing. This earlier response enabled more efficient use of resources and reduced the duration and cost of on-the-ground response efforts. Over time, this shift contributed to a more proactive posture toward emerging risks to public safety.

- The commander in defense explained how First Alert helped them relay information more quickly for resources to act faster in the field. In the past, it could take up to 4 hours for critical updates — such as roadblocks, disruptions, or other incidents — to reach them through traditional, bottom-up reporting channels. Now, they receive early warnings in as little as 5 minutes. The commander described the impact, noting: “We used the First Alert tool to [stay informed of] disruptions along our planned routes. Overlaying data onto our maps allowed us to adjust in advance. It saved a lot of time and money. If you’re sitting idling for hours in tanks or other vehicles, you’re burning a lot of fuel and budget.”

The commander continued: “There was an instance during an operation overseas where our unit was already moving along a planned route when [an incident] started blocking major intersections. Normally, our interpreter would have to call us with an update so we could adjust, but First Alert actually beat the interpreter to it. We were already [following] the [incident] and notified other task forces to avoid the area.”

- The director of operations in law enforcement described a critical event in which they were able to alert partner organizations and prompt action within an hour — rather than the several hours it would have typically taken in the prior environment. The director explained: “We recently had a [major incident] that impacted critical infrastructure and were worried that it could have been an attack. Immediately after I learned about the [incident] from First Alert, I was able to make sure that the appropriate resources got out to the scene to respond. I was getting notifications from Dataminr before I got them from my own department.”

The director of operations continued: “The big risk we’re focused on is preventing or subduing a major incident. That’s always the primary concern. We’re trying to stay ahead of situations like active shooters and [other risks to public safety]. At large-scale events, there are often [people] who stir up the crowd and push things in a direction that the event was never intended to go. First Alert helps us go in and minimize the [safety] more quickly.”

The director concluded: “It costs a lot of money to deploy law enforcement, because the personnel and staffing time is expensive. You also have to factor in the fact that we’re bringing a lot of assets to the scene, whether it’s drones, robots, radiation detection, or canines, depending on the scenario. So, it can vary greatly, but First Alert is saving us a lot of money.”

- The senior detective in legal services described an incident in which Dataminr flagged an online post with potential reputational consequences. Because the alert surfaced within an hour of the post going live, the team was able to quickly assess and escalate the issue. Without Dataminr, they noted that the post likely would have gone unnoticed for days or even weeks, because it fell outside typical information-processing parameters and was not something they would have proactively searched for.
- The supervisor of operations in law enforcement shared that they now receive information about critical events from First Alert an hour faster, on average, than they previously did through public news or reports from partner agencies. They explained: “The timing varies, but in most cases, we’re seeing information from Dataminr First Alert before we get it through other alerting mechanisms. There have been incidents, like a mass shooting in another state, where we received the alert before anything hit the news or came through local channels. We’re able to stay ahead more consistently without having to rely solely on catching something at the right time ourselves while also juggling other work.”

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- Prior to using Dataminr First Alert, operations analysts manually discovered 150,000 signals in Year 1 by searching across open-source platforms such as social media, blogs, and public news feeds. This total includes both relevant and irrelevant content, all of which required analyst time to review. As the overall number of risks to the safety of people and assets increases, this number rises by 15% annually to 172,500 in Year 2 and 198,375 in Year 3.
- On average, 0.01% of signals result in escalation before Dataminr First Alert.
- The average cost per hour for response operations is \$200. This represents the estimated average hourly cost of deploying field resources by the composite organization to respond to critical events.
- The average time required to respond to an event before Dataminr is 4 hours.
- With Dataminr First Alert, the composite filters out a significant portion of irrelevant noise and has an alert volume of 15,000 in Year 1. As the overall number of risks to the safety of people and assets increases, this number rises by 15% annually to 17,250 in Year 2, and 19,837 in Year 3.
- On average, 0.05% of signals result in escalation with Dataminr First Alert. This higher escalation rate compared to the preadoption rate of 0.01% reflects Dataminr First Alert’s improved accuracy and prioritization capabilities, which help operations analysts identify and escalate more relevant and actionable public safety events that may have been previously missed or overlooked.
- With Dataminr First Alert, the composite experiences a 50% reduction in first response time.

Risks. This benefit will vary among organizations based on:

- Signal volume before Dataminr First Alert. This may vary depending on factors such as the organization's scope of area served, the number and diversity of consumed sources, the sector-specific public safety landscape, and maturity of existing information-processing workflows.
- Average percentage of event signals that result in escalation before and after Dataminr First Alert.
- Average cost per hour for response operations.
- Average time to respond to critical events before Dataminr First Alert.
- Alert volume with Dataminr First Alert.

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 \$21,000.

50%

Reduction in first response time with Dataminr First Alert

"We're able to react to [public safety events] hours, if not days, ahead of the time with First Alert. When incidents happen, we can quickly share information with the appropriate teams to take action sooner."

Director, operations, law enforcement

Faster First Response					
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Signal volume before Dataminr First Alert	B1	150,000	172,500	198,375
C2	Average percentage of signals that result in escalation before Dataminr First Alert	Composite	0.01%	0.01%	0.01%
C3	Signals that result in escalation before Dataminr First Alert (rounded)	C1*C2	15	17	20
C4	Average cost per hour of response operations	Composite	\$200	\$200	\$200
C5	Average time to respond to an event before Dataminr First Alert (hours)	Composite	4	4	4
C6	Subtotal: Cost of first response before Dataminr First Alert	C3*C4*C5	\$12,000	\$13,600	\$16,000
C7	Alert volume with Dataminr First Alert	B1-B3	15,000	17,250	19,837
C8	Average percentage of alerts that result in escalation with Dataminr First Alert	Composite	0.05%	0.05%	0.05%
C9	Alerts that result in escalation with Dataminr First Alert (rounded)	C7*C8	8	9	10
C10	Reduction in time to first response time with Dataminr First Alert	Interviews	50%	50%	50%
C11	Average time to respond to events with Dataminr First Alert (hours)	C5*(1-C10)	2	2	2
C12	Subtotal: Cost of first response with Dataminr First Alert	C4*C9*C11	\$3,200	\$3,600	\$4,000
Ct	Faster first response	C6-C12	\$8,800	\$10,000	\$12,000
	Risk adjustment	↓15%			
Ctr	Faster first response (risk-adjusted)		\$7,480	\$8,500	\$10,200
Three-year total: \$26,180			Three-year present value: \$21,488		

Streamlined Situation Reporting

Evidence and data. Interviewees said that prior to Dataminr First Alert, operations analysts spent extensive hours manually compiling both recurring reports (such as weekly information briefs and situational awareness updates) and major reports (including comprehensive public safety assessments, incident analysis reports, and deep-dive evaluations of specific or emerging events). These reports previously depended on fragmented, static data sources, which frequently became outdated by delivery time. This manual effort hindered operations analyst teams' agility by slowing down their ability to relay information about emerging events in a timely manner.

With the First Alert investment, interviewees' organizations gained real-time information processing across diverse public data sources that were automatically filtered to surface high-priority information. This shift significantly reduced the time analysts spent consolidating and verifying information for faster, more accurate situation reporting.

- The commander in defense shared that the extensive manual effort required for situational awareness and critical event discovery in their prior environment made it impossible to meet the demand for situation reporting across a wide operational footprint: "We're only allotted two analysts in our unit, and with [nearly 1,000] partners and over 100 advisors employed across [our region] on any given day, there was no way I could ask our two analysts to produce weekly [information] summaries or open-source reports. They were simply overwhelmed. We needed to build a common operating picture that our people could access while on location to see what was happening in their area."
- The director of operations in law enforcement explained: "Our analysts produce various situational awareness briefings, including special event assessments. Some are specific to an event that is shared only with those involved, and others are broader alerts sent countywide to make sure everyone is [aware of] particular types of [events]. For projects involving three or four analysts over several days, First Alert saves us several hours of work depending on the size and scale of the event they're creating a report for."

- The senior detective in legal services said: “We appreciate the AI-generated summaries that First Alert provides. They give us the latest information and a quick rundown of everything that’s happened around a specific event, so we can keep up as it develops. Instead of reading and stitching together multiple updates manually, I can review a concise synopsis and quickly pass it along to others on the team. Whereas before, it would take 30 to 45 minutes to create a report ourselves.”

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization’s operations center has a team of 10 operations analysts in Year 1, which grows to 11 in Year 2 and 12 in Year 3 as the number of risks to the safety of people and assets increases and the organization expands its data source coverage.
- On average, each operations analyst produces two recurring situation reports per week, each requiring 1 hour to complete.
- With Dataminr First Alert, operations analysts experience a 50% reduction in time spent producing recurring situation reports.
- The average fully burdened hourly rate of an operations analyst is \$50.
- Five operations analysts are involved in producing major situation reports.
- The operations analysts collectively produce an average of five major situation reports per quarter, each requiring 16 hours to complete.
- With Dataminr First Alert, operations analysts experience a 75% reduction in time spent producing major situation reports.
- For this benefit, the composite has a productivity recapture rate of 50%. Employees spend most of the time they save on activities that support the organization’s mission, but they do not dedicate all reclaimed time to value-added work.

Risks. This benefit will vary among organizations based on:

- Number of operations analysts involved in reporting.
- Number of recurring and major situation reports produced.
- Time spent producing recurring and major situation reports prior to Dataminr First Alert.
- Average fully burdened hourly rate of an operations analyst.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$99,000.

75%

Reduction in time spent producing major situation reports

50%

Reduction in time spent producing recurring situation reports

Streamlined Situation Reporting					
Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Operations analyst involved in producing recurring situation reports	A1	10	11	12
D2	Average recurring situation reports produced per analyst per week	Composite	2	2	2
D3	Time spent producing recurring situation reports before Dataminr First Alert (hours)	Composite	1	1	1
D4	Reduction in time spent producing recurring situation reports with Dataminr First Alert	Interviews	50%	50%	50%
D5	Time spent producing recurring situation reports avoided with Dataminr First Alert (hours)	D1*D2*52 weeks*D3*D4	520	572	624
D6	Average fully burdened hourly rate of operations analyst	A5	\$50	\$50	\$50
D7	Subtotal: Time savings on producing recurring situation reports	D5*D6	\$26,000	\$28,600	\$31,200
D8	Operations analysts involved in producing major situation reports	Composite	5	5	5
D9	Average major situation reports produced per quarter	Composite	5	5	5
D10	Time spent producing major situation reports before Dataminr First Alert (hours)	Composite	16	16	16
D11	Reduction in time spent producing major situation reports with Dataminr First Alert	Interviews	75%	75%	75%
D12	Time spent producing major situation reports avoided with Dataminr First Alert (hours)	D8*D9*4 quarters* D10*D11	1,200	1,200	1,200
D13	Subtotal: Time savings on producing major situation reports	D6*D12	\$60,000	\$60,000	\$60,000
D14	Productivity recapture	TEI methodology	50%	50%	50%
Dt	Streamlined situation reporting	(D7+D13)*D14	\$43,000	\$44,300	\$45,600
	Risk adjustment	↓10%			
Dtr	Streamlined situation reporting (risk-adjusted)		\$38,700	\$39,870	\$41,040
Three-year total: \$119,610			Three-year present value: \$98,966		

Improved Operations Analyst Readiness

Evidence and data. Interviewees explained that before Dataminr First Alert, training new operations analysts was a lengthy and complex process. Analysts needed to conduct master critical event discovery and distillation while also developing judgment to prioritize alerts based on their organization's mission, specific use cases, and unique public safety landscape. Before they could become productive in their role, new analysts required extensive one-on-one training from director-level resources and significant time spent understanding which signals were truly relevant.

With Dataminr First Alert, onboarding new analysts becomes significantly more efficient. The platform's automated alert triage and intuitive interface helped analysts quickly recognize and prioritize breaking events aligned with organizational goals. Directors who once spent substantial time on hands-on training were able to shift their focus to strategic initiatives and collaborating with different departments and agencies.

- The senior detective in legal services shared that supervising new analyst hires in the prior environment required 40% to 50% of their own time. This was due, in part, to the need for personnel with analyst or sworn law enforcement backgrounds, given the level of confidentiality and contextual judgment required. Each hire also needed an environment to access and view public data platforms safely. The time and effort involved in establishing, managing, and remaining accountable for these environments contributed significantly to the operational overhead associated with onboarding new hires.

- The manager of operations in law enforcement said: “Training analysts in our prior environment was very cumbersome because there was a lot of information to teach someone on the spot. We have so many different use cases, events, and areas of focus. The time to train an analyst varied significantly based on how tech-savvy they were. Training our people on First Alert is pretty instant. It’s fairly easy to use, even for those who are less technical. Once a few people on our team learned how to use it, they passed their learnings down to other colleagues. It was very seamless.”
- The director of safety and security in education explained: “There is a lot of training needed to view [public data] effectively without a tool like First Alert. Without it, it would take six months to a year just to train someone to understand our full operational footprint and what to [consume]. Of that time, I would have to spend a quarter of my time training the resource. Even then, we’re receiving information through Dataminr that I’m not even sure how we’d manually access without it, including alerts from city or law enforcement agencies in foreign countries.”

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization’s operations center has a team of 10 operations analysts in Year 1, which grows to 11 in Year 2 and 12 in Year 3 as the number of risks to the safety of people and assets increases and the organization expands its data source coverage.
- On average, 20% of the operations analyst team turns over annually, which requires new hires to be trained.
- Before Dataminr First Alert, each analyst requires six months of training to learn to detect, distill, and deliver event assessment information.
- With First Alert, the time to train new operations analysts is reduced by 90%.
- The average fully burdened hourly rate of an operations analyst is \$50.
- One operations director is involved in training operations analysts prior to First Alert, spending 25% of analysts’ total training time on hands-on instruction and guidance.
- The average fully burdened hourly rate of an operations director is \$75.
- For this benefit, the composite has a productivity recapture rate of 50%. Employees spend most of the time they save on activities that support the organization’s mission, but they do not dedicate all reclaimed time to value-added work.

Risks. This benefit will vary among organizations based on:

- Operations analyst team size.
- Average operations analyst churn rate.
- Time to train operations analysts on detecting, distilling, and delivering safety risk assessment information prior to Dataminr First Alert. This may vary based on factors such as analysts’ prior expertise in public safety event risk assessment, the complexity of an organization’s public safety environment, and the efficiency of internal knowledge-sharing processes.
- Average fully burdened hourly rates of an operations analyst and an operations director.
- Number of directors involved in training analysts.

Results. To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$117,000.

90%

Reduction in operations analyst training time

2,592 hours

Training time avoided for new operations analysts over three years

Improved Operations Analyst Readiness					
Ref.	Metric	Source	Year 1	Year 2	Year 3
E1	Operations analysts	A1	10	11	12
E2	Average operations analyst churn rate	Composite	20%	20%	20%
E3	New hires requiring training	E1*E2	2	2	2
E4	Time to train on detecting, distilling, and delivering event assessment information per analyst before Dataminr First Alert (months)	Composite	6	6	6
E5	Total time to train on detecting, distilling, and delivering event assessment information per analyst before Dataminr First Alert (hours)	E4*160 hours	960	960	960
E6	Reduction in operations analyst training time with Dataminr First Alert	Interviews	90%	90%	90%
E7	Training time avoided per analyst with Dataminr First Alert (hours)	E5*E6	864	864	864
E8	Average fully burdened hourly rate of operations analyst	A5	\$50	\$50	\$50
E9	Subtotal: Faster time to productivity for operations analyst	E3*E7*E8	\$86,400	\$86,400	\$86,400
E10	Operations directors involved in training operations analysts before Dataminr First Alert	Composite	1	1	1
E11	Average percentage of analyst training time that requires operations director support	Interviews	25%	25%	25%
E12	Average fully burdened hourly rate of operations director	Composite	\$75	\$75	\$75
E13	Subtotal: Director training time savings	E5*E10*E11*E12	\$18,000	\$18,000	\$18,000
E14	Productivity recapture	TEI methodology	50%	50%	50%
Et	Improved operations analyst readiness	(E9+E13)*E14	\$52,200	\$52,200	\$52,200
	Risk adjustment	↓10%			
Etr	Improved operations analyst readiness (risk-adjusted)		\$46,980	\$46,980	\$46,980
Three-year total: \$140,940			Three-year present value: \$116,832		

Unquantified Benefits

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

- Improved mission-critical outcomes.** Interviewees shared how Dataminr First Alert helped their organizations save lives, prevent incidents, and enhance overall public safety by delivering real-time alerts tailored to their unique mission priorities. By quickly distilling vast amounts of unstructured data into precise, actionable information, First Alert ensured that organizations had more accurate critical event discovery to better anticipate emerging public safety events and respond proactively. This improvement in situational awareness and first response directly contributed to strengthening the safety and security of the communities they serve.
 - The commander in defense explained: “First Alert is critical to our mission planning because we can tailor alerts to our specific information requirements. This helps us decide where to deploy personnel and equipment. We’ve built a shared operating picture around it, and it’s become core to how we make decisions and keep people informed and safe.”

The commander continued: “We’ve been able to save costs associated with running day-to-day operations by making better decisions with quicker insights, but more than that, First Alert has helped save lives. We’ve been near areas where there were gunshots fired, and we were able to immediately call our partners who were approaching the danger and tell them to reroute.”

- The supervisor of operations in law enforcement said: “There have been instances where something was posted online about a school lockdown or a possible shooter nearby. We were able to quickly relay that to local law enforcement, work with them to ensure the school was safe, and help determine whether there was actually a gun on campus or if the threat was in the surrounding area.”
- **Enhanced cross-functional collaboration.** Interviewees noted that First Alert facilitated improved information sharing and coordination both within their departments and across external agencies and organizations. By providing a trusted, centralized source of real-time information, the platform helped break down silos to enable more effective joint-response efforts and heightened situational awareness across multiple stakeholders.
 - The operations director in law enforcement said that the information provided by First Alert allows them to improve joint response and collaboration alongside many regional partners, including local organizations, explaining: “Across [all the] counties we serve, we’re the largest department by far. Smaller [organizations] don’t have the same resources or capacity to invest in technology and personnel like we do, so we [partner] with them. We also partner closely with critical infrastructure, schools, and religious organizations, because if you look nationally, those are often the primary targets where major incidents occur. We work to build relationships with leadership at these sites if they have the capabilities to deal with [public safety events we’ve identified], then they will handle it. If they don’t, and ask for our assistance, then we will certainly provide any help that we can in dealing with the [risk to safety].”
- **Improved preparedness for travel and on-site safety risk assessments.** Interviewees described how they leveraged First Alert’s real-time alerts to assess conditions before travel or field deployments. Having access to proactive safety risk assessments allowed their teams to better plan and adjust in dynamic environments and subsequently reduce exposure to emerging events and enhance safety for personnel on the move.
 - The senior detective in legal services shared: “During a recent high-profile event, our team received real-time alerts about [incidents] unfolding near our travel route. With those updates coming in as we were on the way, we quickly rerouted and avoided the area altogether. It wasn’t necessarily about immediate danger, but we were able to avoid unnecessary disruption. Without First Alert, we likely wouldn’t have known until we were already there, and it would’ve taken longer to get to where we needed to go.”
 - The director of safety and security in education explained: “Dataminr plays a valuable role in giving me situational awareness ahead of [and during] travel once students on study abroad programs are on the ground. It allows me to get real on-the-ground information about what’s happening in a defined area, not just about broader incidents elsewhere in the city. Having those localized alerts gives us timely insight into conditions in the immediate area [of the students].”

The director of safety and security continued: “If it’s a study abroad program, I’ll usually travel with someone from our study abroad office and sometimes the faculty member leading the trip to conduct a safety risk assessment. If it’s a mission trip, I’ll travel with someone from that team who knows the local partner well. We’ll do assessments, approve the location for future travel, and continue to [assess] the situation after the fact. Some of my on-site safety risk assessment trips happen months before students arrive, and things can change significantly, especially if there’s political instability. I use Dataminr to [stay aware of] developments and help decide if any changes to our travel approvals are needed.”

“Dataminr First Alert is absolutely a life-saving tool. During operations abroad, we were able to avoid dangerous routes where [safety incidents] would flare up quickly. We rerouted multiple movements based on real-time alerts. The [information] we got was so reliable that [a neighboring task force] started to come to us for situational awareness.”

Commander, defense

“First Alert has helped us strengthen two-way communication and share situational awareness. Supporting [our partners] helps keep their communities safer and, in turn, helps prevent issues from spilling over into our jurisdiction. It’s a true partnership that benefits both sides.”

Director, operations, law enforcement

Flexibility

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

- **Strategic partnership with Dataminr.** Interviewees shared that their ongoing partnership with Dataminr enhanced their agility by ensuring continuous, mission-aligned event coverage that could quickly adapt to evolving information requirements. They noted that Dataminr’s team fully managed the development and deployment of new alerting streams and alert configurations — sometimes completing requests within a few hours. This hands-off, rapid-response approach enabled organizations to seamlessly integrate emerging events and expand First Alert’s impact across multiple departments and operational scenarios.
 - The senior detective in legal services explained: “I have big ideas for how we can expand our use of First Alert. We’ve talked about integrating it into [other apps], but I also see value for other teams and task forces. Over time, we’d also like to add more users to the tool so we’re not relying on just one person to catch something important while others are busy or unavailable.”

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in [Total Economic Impact Approach](#)).

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
Ftr	Fees to Dataminr	\$0	\$105,000	\$110,250	\$115,500	\$330,750	\$273,347
Gtr	Training and vendor management	\$3,560	\$1,184	\$1,184	\$1,317	\$7,245	\$6,604
	Total costs (risk-adjusted)	\$3,560	\$106,184	\$111,434	\$116,817	\$337,995	\$279,951

Fees To Dataminr

Evidence and data. Interviewees’ organizations incurred annual licensing fees to Dataminr on a per-seat basis. Most interviewees reported that their annual costs grew over time as they increased user counts to incorporate more team members and expand the platform’s value across departments. Pricing may vary. Contact Dataminr for additional details.

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization incurs an annual licensing fee of \$100,000 in Year 1. This grows to \$105,000 in Year 2 and \$110,000 in Year 3 as the composite increases the number of users.

Risks. This benefit will vary among organizations based on:

- Number of Dataminr First Alert users.
- Additional features purchased, including new delivery methods for integration into internal systems extended functionality.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$273,000.

Fees To Dataminr						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
F1	Annual licensing fees to Dataminr	Composite		\$100,000	\$105,000	\$110,000
Ft	Fees to Dataminr	F1		\$100,000	\$105,000	\$110,000
	Risk adjustment	↑5%				
Ftr	Fees to Dataminr (risk-adjusted)			\$105,000	\$110,250	\$115,500
Three-year total: \$330,750				Three-year present value: \$273,347		

Training And Vendor Management

Evidence and data. Interviewees shared that implementation of First Alert was fully handled by Dataminr and typically completed in less than a day, which meant that neither internal nor external implementation costs were incurred. After deployment, interviewees’ organizations required only lightweight training and minimal vendor oversight to support First Alert usage. Most users needed just a couple of hours of training to understand the platform’s interface and how to manage alert workflows. Some interviewees noted that onboarding was often managed internally by early adopters

or team champions, rather than by formal training teams. Vendor management was limited to routine check-ins or occasional escalations, typically handled by one to two team members who would meet with Dataminr. Several organizations emphasized that once deployed, First Alert required relatively little ongoing time or effort to manage.

- The senior detective in legal services shared: “Now that [First Alert] is fully up and running, it doesn’t take much time to manage it at all. In the beginning, we had weekly meetings with Dataminr so they could check in and see how things were going. They were very gracious about it. We’re used to slow, drawn-out processes within government, so this felt very fast to us.”

The senior detective continued: “Getting new users set up is quick. We just provide their name and email, and they get passwords and access to First Alert within an hour. How quickly they become proficient varies depending on their comfort with technology and navigating the dashboards. For the initial users during the demo, Dataminr provided training, and I expect they’d do the same for new users once we add more licenses.”

- The operations director in law enforcement said: “We are regularly asking the Dataminr team to make adjustments to the notifications on the alerting system based on special events that are coming up. The team is always very responsive and works hard to help us. We have quarterly meetings with them to lay out what our upcoming calendar is looking like, and they make the necessary adjustments within the platform to ensure that we’re getting notifications tailored to our needs.”

The operations director continued: “The initial training took a couple of hours because it’s a pretty intuitive product. The Dataminr team did some online training for us to show us how everything works. For those who need a bit more learning time, they can call them back and they’ll walk them through it.”

Modeling and assumptions. Based on the interviews, Forrester assumes the following about the composite organization:

- The composite organization has 15 total First Alert users in Year 1, which grows to 17 in Year 2 and 18 in Year 3 as the number of risks to the safety of people and assets increases and the organization expands its data source coverage.
- In the Initial period, 100% of users require training. This decreases to 20% in the three subsequent years to account for organizational churn and growth.
- On average, it takes 2 hours to train each user.
- The average fully burdened hourly rate of resources requiring training is \$63.
- On average, 5% of users are involved in vendor management.
- The average fully burdened hourly rate of resources involved in vendor management is \$75.
- On average, vendor management requires 20 hours during the Initial period, decreasing to 10 hours annually in Years 1, 2, and 3.

Risks. This benefit will vary among organizations based on:

- Number of Dataminr First Alert users.
- Average percentage of users requiring training.
- Average fully burdened hourly rate of resources requiring training.
- Average percentage of users involved in vendor management.
- Average fully burdened hourly rate of resources involved in vendor management.

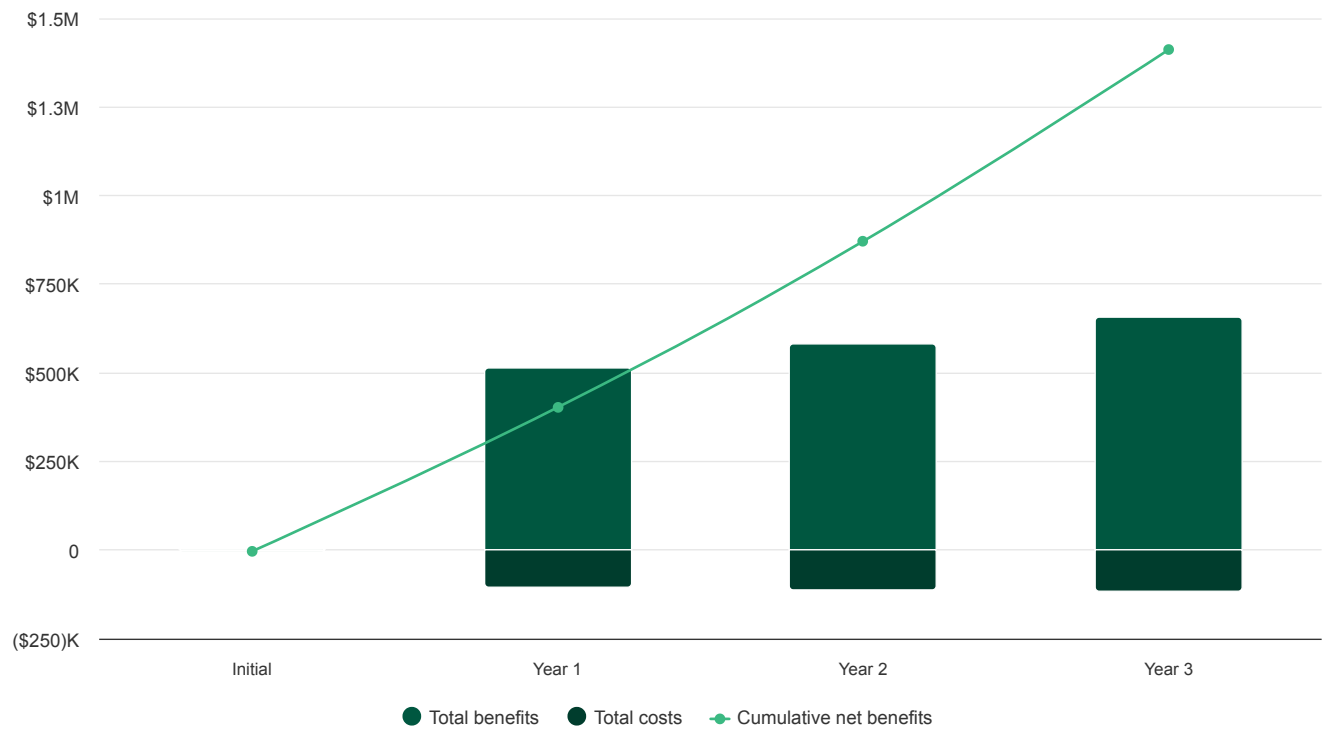
Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of \$7,000.

Training And Vendor Management						
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	Total users	Composite	15	15	17	18
G2	Average percentage of users requiring training	Composite	100%	20%	20%	20%
G3	Users requiring training	G1*G2	15	3	3	4
G4	Average training time (hours)	Interviews	2	2	2	2
G5	Average fully burdened hourly rate of resources requiring training	(E8+E12)/2	\$63	\$63	\$63	\$63
G6	Subtotal: Training cost	G3*G4*G5	\$1,890	\$378	\$378	\$504
G7	Average percentage of users involved in vendor management	Composite	5%	5%	5%	5%
G8	Users involved in vendor management	G1*G7	1	1	1	1
G9	Average fully burdened rate of resources involved in vendor management	E12	\$75	\$75	\$75	\$75
G10	Average time spent on vendor management (hours)	Interviews	20	10	10	10
G11	Subtotal: Vendor management cost	G8*G9*G10	\$1,500	\$750	\$750	\$750
Gt	Training and vendor management	G6+G11	\$3,390	\$1,128	\$1,128	\$1,254
	Risk adjustment	↑5%				
Gtr	Training and vendor management (risk-adjusted)		\$3,560	\$1,184	\$1,184	\$1,317
Three-year total: \$7,245			Three-year present value: \$6,604			

Financial Summary

Consolidated Three-Year, Risk-Adjusted Metrics

Cash Flow Chart (Risk-Adjusted)



Cash Flow Analysis (Risk-Adjusted)						
	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	(\$3,560)	(\$106,184)	(\$111,434)	(\$116,817)	(\$337,995)	(\$279,951)
Total benefits	\$0	\$512,335	\$580,113	\$657,593	\$1,750,041	\$1,439,250
Net benefits	(\$3,560)	\$406,151	\$468,678	\$540,776	\$1,412,045	\$1,159,299
ROI						414%
Payback period (months)						<6

Please Note

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.

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.

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 First Alert.

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 First Alert can have on an organization.

Due Diligence

Interviewed Dataminr stakeholders and Forrester analysts to gather data relative to First Alert.

Interviews

Interviewed four decision-makers at organizations using First Alert to obtain data about 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.

Glossary

Total Economic Impact Approach

Benefits

Benefits represent the value the solution delivers to the business. The TEI methodology places equal weight on the measure of benefits and costs, allowing for a full examination of the solution's effect on the entire organization.

Costs

Costs comprise all expenses necessary to deliver the proposed value, or benefits, of the solution. The methodology captures implementation and ongoing costs associated with the solution.

Flexibility

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

Risks

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."

Financial Terminology

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.

Appendixes

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 solution providers in communicating their value proposition to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of business and technology initiatives to both senior management and other key stakeholders.

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 solution providers in communicating their value proposition to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of business and technology initiatives to both senior management and other key stakeholders.

Disclosures

Readers should be aware of the following:

This study is commissioned by Dataminr 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 First Alert.

Dataminr 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.

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

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